



Government of **Western Australia**
Department of **Health**

Implementation of models of care and frameworks – progress report 2015



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Executive Summary

This report is a collection of summaries regarding the progress made in implementing 58 models of care and 9 frameworks (Policies) developed through Health Strategy and Networks, Strategic System Policy and Planning Division at WA Health.

Achievements across the models have been summarised according to three themes:

- safety and quality
- service planning and improvement
- consumer and carer centred care

For each model and framework, a brief summary of progress has been provided which outlines the individual achievements, areas of progress and a summary of the challenges restricting full implementation of the Policies. A rating, out of four, estimating the degree of implementation and potential priorities for focus over the next 18 months have been identified for each Policy. Additionally, the report highlights ten common challenges across the Policies which have restricted full implementation.

It is apparent from the report that the Policies have been integral in driving change across WA Health; with the result being numerous service improvements and efficiencies. They have provided an opportunity to bring together all the partners across health and in many instances external to health, to identify a consensus view and a blueprint to achieve the highest possible standards of care for all Western Australians.

The next challenge is to reflect on the value of the Policies to date, to build upon the achievements and to identify opportunities for Health Strategy and Networks to support systemic change in the future to achieve better health outcomes for people across WA.

Background

WA Health Networks were established in 2006 as a result of the report of the Health Reform Committee, *A Healthy Future for Western Australians*¹. This report identified opportunities to overcome fragmentation and duplication across the WA health system through collaboration and system wide engagement and partnerships across public and private health service providers.

“The WA Health Networks bring together key stakeholders in the public, private, non-government and academic sectors to oversee the development of priorities underpinned by epidemiology, policy and protocols, planning and performance targets for their respective clinical program areas. The Health Networks are not fund holders, but through the planning and performance functions can have direct influence on the process for allocating funding, while providing health services with the protocols and policies to optimise their performance and health outcomes for the people of Western Australia.²”

In 2014, 18 Health Networks exist with over 3800 members from which 58 models of care and 9 frameworks have been produced collaboratively by clinicians, consumers/carers, policy makers, and researchers across a range of disease and population-based health areas.

Models of care outline the principles and directions that apply to the provision of healthcare services to deliver the right care, in the right place, at the right time by the right team³. In particular they focus on the systemic structures and strategies to improve service delivery. Together with the WA Health Clinical Services Framework 2010-2020⁴, models of care have provided the foundation for service and facility planning for specific care processes across the continuum of care. Models of care also have informed the prioritising of funding allocations and purchasing intentions as is demonstrated in the Health Activity Purchasing Intentions 2012-13⁵.

In 2012, a model of care survey was undertaken, to provide a snapshot of how models of care, developed by the WA Health Networks have been implemented by various service providers across the State⁶. The survey used RE-AIM methodology to survey 537 respondents, with the majority of survey responses coming from WA Health services and 24% of responses from non-government, research, private and other services. Overall, the results show that models of care have guided planners and health service providers in delivering best-practice care. The majority of responders agreed or strongly agreed that the models promoted a more collaborative way for people to plan/deliver health care, and engage clinicians, consumers and carers in developing evidence-based care⁶. Table 1 includes the results measuring the effectiveness of the models in guiding planning and delivery of health services and promoting shared knowledge and collaboration.

Table 1: Active use* of the models of care¹

Uses for the model of care	Percentage of responses
Encourage collaboration across the health sector	81%
Promote a shared vision of health reform	78%
Promote an understanding of quality health care	79%
Promote the delivery of evidence-based care	80%
Inform health care planning	82%
Inform strategic goals and objectives	80%
Inform health related service delivery	82%

*Active use: encompasses “sometimes/often/always” responses

Over two thirds of responses indicated that models of care had a positive or very positive impact on:

- the quality of health care delivered by their work area
- community access to the right care, in the right place, at the right time and by the right team.

WA Health Networks have also developed a number of frameworks. These policy documents have also facilitated positive change across health in WA. This report also provides a summary of the progress made in implementing the frameworks and the challenges restricting further implementation.

Responsibility for monitoring implementation

There is currently no formalised process for monitoring the implementation of the Policies. Some Policies have associated implementation plans developed or in planning. A number of the health networks identify that they have responsibility for monitoring the implementation of the Policies in partnership with relevant services providers.

Safety and quality achievements

Improvements to standards of care

Policies have contributed to the development of **Australian** and **State** standards of care which play an important role in benchmarking the quality of clinical practice and care and guiding health professionals to deliver the best quality care.

Implementation of Australian programs and standards

Policies have contributed to the implementation of Australian programs and standards.

Improvements to data collection and reporting statewide

Policies have made significant improvements to the way data is collected and reported across WA Health in areas such as aged care, cardiovascular health, injury and trauma, neurosciences and palliative care, all which have led to cost savings and efficiencies.

Development of clinical guidelines for care

Policies have developed clinical guidelines for care including consideration of screening, referral, treatment and/or diagnosis.

Research and development

Policies support research and pilot studies to trial new approaches or treatments to undertake cost-effectiveness analysis.

In 2014, the recommendations and principles from the **Dementia and Delirium Models of Care** were combined into a single framework document that focuses attention onto acute hospitals and patients with cognitive impairment. The emphasis is on leveraging improvements using quality processes, acknowledging that cognitive impairment is currently being mapped into national quality standards.

WA is involved in the **Electronic Persistent Pain Outcomes Collaboration** which aims to support continuous improvement through national benchmarking of care and treatment which has led to increased quality and effectiveness of pain management in Australia.

Diabetes education for self-management for ongoing and newly diagnosed sufferers was adapted from the UK and run in WA. A diabetes management book has been produced to support and empower people with diabetes to self-manage their condition and to communicate with health professionals. The self-management and review program developed by Rockingham and Fremantle diabetes services won the 2013 Director-General's Award.

The **Renal Health Network** have developed statewide quality improvement indicators for renal replacement therapy, statewide clinical practice standards and initiated an independent review of the WA Home Dialysis Program.

Familial Hypercholesterolaemia Model of Care

An evaluation of the hypercholesterolaemia screening program demonstrated the cost-effectiveness ratio over 10 years was predicted to be AUD\$4,155 per years of life saved and AUD\$3,565 per quality adjusted life years gained.

Service planning and improvement achievements

Planning and development of new services

Policies have been integral in the development of statewide plans and providing input into planning of new services, as well as mapping or reviewing existing services and identifying gaps in service provision.

Workforce training, education and staff retention

Policies have strengthened the WA Health workforce through workforce planning, training and education and increased the capacity of services.

Development of clinical pathways or referral guidelines

Policies are committed to development of clinical pathways across entry, assessment and discharge services.

Early intervention and health promotion/prevention programs

Policies contribute to early intervention through health prevention/promotion programs and the development of universal screening or assessment tools.

Fetal Alcohol Spectrum Disorder (FASD)

The audit-c screening tool for FASD is now included in the WA hand held pregnancy record and will influence activity at an Australian level.

The WA Neonatal Network was established in 2009 to provide advice on the coordination of neonatal beds and care across WA, support the directorate of neonatology and drive the implementation of recommendations from the **Neonatal Framework**.

The Stroke Services program will focus on the four areas of stroke care infrastructure, clinical practice, service delivery processes and protocols and workforce development and training. The program is based on the key recommendations of the **Stroke Model of Care**.

Falls specialist coordinators have been established in all metropolitan hospitals sites, located with day therapy units with links to regional sites. This has resulted in improved clinical skills and exchange of clinical knowledge for improved falls risk management and prevention.

Referral guidelines developed:

- Evidence based clinical guidelines for adults in the terminal phase (palliative care)
- Outpatient and elective services referral guidelines for abdominal aortic aneurysm
- Referral pathways between paediatric, adult and community services for patients with cystic fibrosis.
- Cardiovascular and secondary prevention pathway principles
- Chest pain /suspected acute coronary syndrome pathways for WA Country Health Service

Consumer and carer centred care achievements

Making services more accessible to rural and remote areas

Policies have helped provide more accessible services in rural and remote areas through increased outreach/visiting specialists, improved equity of access, enhanced use of telehealth, increased options of ambulatory care as well as establishment of mobile and fixed social outreach services

Focusing services on those who need it most

Policies are committed to improving equity of access to services and to meet the service needs of vulnerable and/or disadvantaged groups.

Empowering consumers and carers

Policies empower consumers and carers through developing community care packages or information for patients and families focusing on prevention, services, treatment options and chronic disease self-management.

Spinal Pain Model of Care

The development and launch of the painHEALTH website that hosts consumer-focused and evidence-based information and skills about self-management for musculoskeletal pain, has recorded over one million hits since April 2013. It won the 2014 WA Health award for community engagement.

Burn Injury Model of Care

The integration of the Princess Margaret Hospital Burns Telehealth Service has demonstrated a cost saving of over \$6.5m in the first 6 years of implementation due to a reduction in avoided unnecessary patient transfers and admissions, avoided patient assisted travel costs and improved collaboration and communication.

Improving equity of services

- Expansion and consolidation of outreach geriatric evaluation and management visiting services to rural and remote regions of the state.
- Increased outreach cancer specialist support has meant care closer to home and enhanced services to several regional areas.
- Interagency commitment to improving the delivery and coordination of ear, eye and oral health care for children living in rural and remote areas of WA.
- Development of specific mobile podiatry and diabetes education service that targets Aboriginal people in the metropolitan area.
- General Practice After-Hours program has focussed on providing greater access to after-hours medical care.
- Support for the Perth Mobile GP service to provide primary care services to disadvantaged and homeless people.
- Trial of Health Navigator for people with chronic obstructive pulmonary disease, diabetes, and chronic heart disease in the wheatbelt and great southern regions.

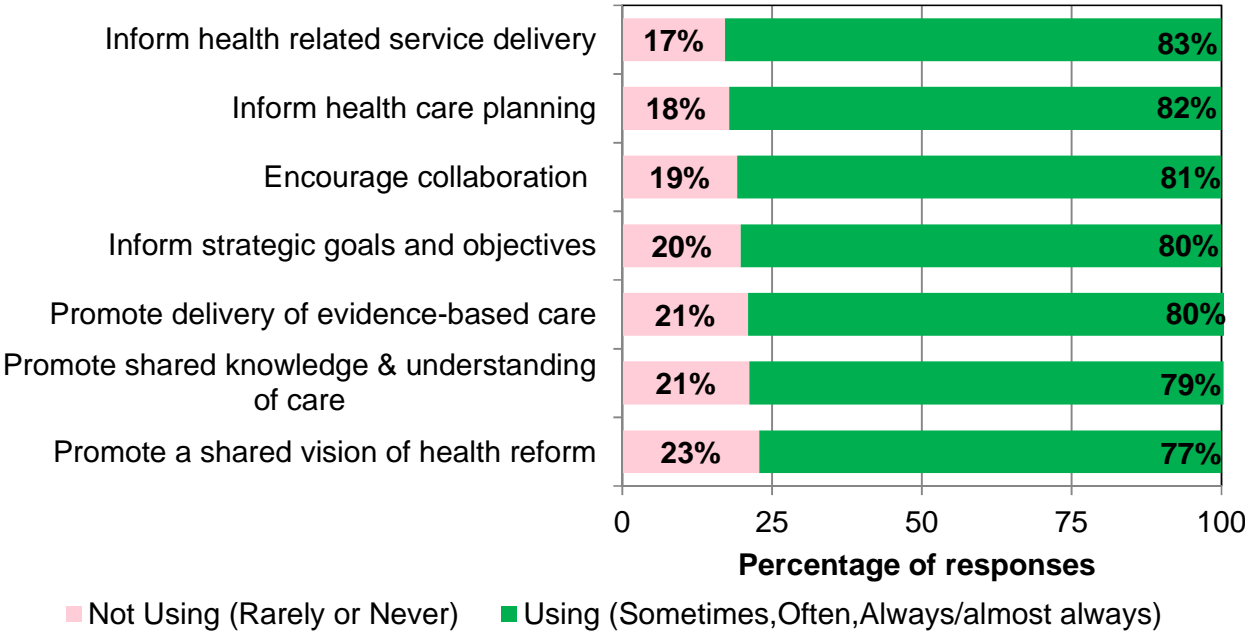
Reach and effectiveness

Health Strategy and Networks Policies have reach across WA Health and are used in health service delivery related roles, health administrators working in policy and planning and have demonstrated reach into non-government, research and private sectors.

How are the Policies used?

Models of care and frameworks are effectively used across WA Health for planning of service delivery, providing project support and positively influencing health with policies integrating best-practice care into planning of health services. Results from the models of care survey demonstrated how models are used. This is summarised in Figure 1 below.

Figure 1. Effectiveness: Use of the ‘models of care’



Comparative progress of the Policies

It is evident from this report that there are vast differences between the Policies considered. For example, some models of care are more clinically based, others take a population or public health approach and some are presented across a continuum of care from prevention through to palliation. Additionally, the frameworks tend to present a high level strategic overview rather than specific detail about services. It is acknowledged that the Policies are all very different and therefore the summaries should not be used to compare progress. It is also recognised that it is impractical and often inappropriate to measure every element of their implementation in detail.

In addition, many Policies were developed and ‘noted’ by the State Health Executive Forum (SHEF) more than five years ago; several have been developed and ‘noted’ more recently. Therefore, the Policies are at different stages of implementation.

To respond to a query about the unified progress of all the Health Strategy and Networks Policies is complex and only useful if variances in focus areas and time from SHEF ‘noting’ are taken into consideration. To assist comparative awareness within the constraints mentioned a rating system has been used for this report to provide an overall picture of the progress of the Policies.

Ratings

For each Policy included in this report, a rating has been provided as an estimate of the degree to which the Policy has been implemented. These ratings are provided alongside each Policy in table 3 (page 16) and table 4 (page 173) as well as on each individual summary.

Table 2: Rating categories for level of implementation

Level of implementation	Progress towards implementation of the Policy
Level 1: Little/no progress	Progress towards the achievement of the recommendations/strategies in the Policy has not commenced, is still in a planning phase or has been delayed.
Level 2: Partial implementation	Some progress has been made toward the implementation of the recommendations or strategies in the Policy.
Level 3: Substantial implementation	Most of the recommendations or strategies of the Policy have been implemented.
Level 4: Full implementation	All the recommendations or strategies of the Policy have been fully implemented.

4 of the Policies were rated as level 1: little or no progress

33 of the Policies were rated as level 2: partial implementation

19 of the Policies were rated as level 3: substantial implementation

1 of the Policies was rated as level 4: full implementation.

(N.B.: some models were not rated as they had only recently been endorsed/noted)

Challenges in implementing Policies

There has been significant progress in the implementation of many of the Policies included in this report. However, some common challenges in progressing the Policies were identified which may have limited their full implementation. The identification of these challenges is useful to identify future planning opportunities for WA Health in regard to the Policies.

1. Expectation to fully implement all recommendations listed in the Models.

The first Models of Care were developed in 2008 as a 'Gold Standard' for service delivery. It was not the original intention that every component or recommendation of the Models would be the sole responsibility of WA Health to implement. Over time the Models have evolved to provide more realistic and achievable recommendations for service change. Complete implementation of the Models and the Frameworks, is often restricted by resourcing and the frequently changing system in which they need to be implemented.

2. Determining ownership and accountability for implementing the Policies.

To date the SHEF has been responsible for supporting and/or endorsing the Policies. As part of this process the chief executives across WA Health are aware of their responsibility to implement components of the Policies. However, to implement many of the recommendations within the Policies often requires partnership approaches, both within health and cross-sectorally. This may have led to some diffusion of ownership and accountability where there is not a clear lead agency identified as part of the recommendation.

3. No dedicated budget to enable full transformational change.

Every Policy developed has resource implications; however there has not been a dedicated budget allocated to each Policy. The models in particular were expected to be cost neutral. To date, many changes have occurred without additional resourcing by integrating services, reallocation of funds and changing policy and practice around care arrangements. There have also been opportunities to access non-recurrent funding through programs such as the State Health Research Advisory Council (SHRAC) and the Australian Better Health Initiative/Better Health Improvement Project. Additionally, the instigation of the models has enabled the positive reform of budget allocations, services agreements and tendering processes across WA Health to align more closely with policy outcomes. However, operating in an environment of competing priorities with a limited source of funding has meant that a number of the Policy recommendations have not been able to be resourced.

4. Operating in a diverse, complex and changing health system incorporating service reconfiguration, technology advances and increasingly complex and expensive treatments.

Each Policy is developed at one particular point in time where future shifts in service design, technology and treatment approaches may not have been anticipated. This has meant that recommendations outlined in the Policy may no longer be relevant or need to be modified to suit the changing environment; inclusive of infra-structure, funding and governance.

5. Increasing service demands with greater burden of disease, health inequality and complexities of cases.

The WA health system is faced with the ongoing challenge of servicing an increasing ageing population, an increasing number of patients with chronic and complex health conditions as well as providing equitable and safe services across the entire state. Future considerations in regard to service planning and improvements, including those specified in the Policies, may require a collective targeting of common factors as well as prioritising areas of highest need.

6. The need to be responsive to reviews and new strategic directions across Australia and WA Health including the Clinical Services Framework, information and communications technology developments and standards in safety and quality.

New policies and strategies are constantly being developed and issued across Australia and within WA. Future Policies need to reflect significant changes in policy direction including the increasing influence of the National Health and Hospitals Reform Agenda. Specific recommendations from the Policies may no longer be relevant, require revision, or new recommendations are to be added into future Policies. Additionally in recognition of the changing policy environment, recommendations within the Policies are often written at a high level, which hinders rapid translation into practice.

7. Need for cultural shift towards new ways of working, including establishing formal cross and inter sectoral partnerships and reallocation of responsibilities.

The importance of collaboration to achieve outcomes in health and wellbeing for Western Australians is well recognised. To achieve many of the recommendations of the Policies requires building stronger links and formalising partnerships between government, public, private and not-for profit sectors. To avoid the diffusion of responsibility, it is vital that a lead agency act as the coordinator and take responsibility for the implementation process for each Policy.

8. Attracting, retaining and supporting an ample workforce.

Workforce attraction, retention and support were identified to be a central issue to implementing the recommendations from the Policies. It is recognised by WA Health that maintaining an ample, trained and productive workforce is an ongoing challenge across the whole health system. To address the workforce challenges there needs to be consideration of innovative models and flexible working arrangements within the constraints of industrial relations agreements and legislation.

9. Need for systematically linked data systems and patient records.

The need for systematically linked data systems and patient records is another area which is recognised as an issue across WA Health. To improve patient outcomes, there is a need to improve the access by clinicians and health care providers to patient information, diagnostic results and treatment. Additionally, there are numerous state and Australian data collections which exist in isolation. If these collections were systematically linked it could provide a comprehensive picture of health system needs into the future and inform policy development and implementation.

10. Sustaining changes under the Activity Based Funding/Activity Based Management (ABF/ABM) system.

The Policies have been operating in a period of major transition and reform across the health system. The introduction of ABF/ABM in WA in 2010, meant health services became funded according to activity rather than funding being historically based. A number of the ABF/ABM targets are linked to the models of care.

The intention is for ABF/ ABM to be expanded into outpatients and community care with an increasing focus on outcome based practice. It is anticipated that this change will also impact on the way that Policies are implemented now and in the future.

The way forward

The substantial value of the Policies in driving change across WA Health is evident from the numerous achievements listed in this report. Significant progress has been demonstrated in the following areas:

- collaborative service planning and improvements
- development and implementation of clinical care and referral guidelines
- enhanced multidisciplinary and coordinated care
- a focus on prevention and early intervention
- dedication to workforce planning, training and support
- investment in research and development
- improved accessibility and equity of services across the state
- a clear emphasis on empowering consumers and carers in the provision of care pathways.

One of the most important components of models of care and frameworks is that they have enabled the bringing together of diverse partners across health to agree on a unified direction for service and care. This has facilitated rapid implementation of some recommendations through increased commitment to reform, the development of non-traditional partnerships and opportunistic identification of non-traditional funding sources.

The achievements demonstrate the value in the Policies, even when only partial implementation has occurred. Future activity needs to continue to build on these achievements while addressing the challenges restricting full implementation and addressing the need for policies to remain current.

Table 3: Summary of models of care

	Network	Model of Care	Date endorsed/noted by SHEF	Level of Implementation
1	Aged Care Network	Amputee Services & Rehabilitation	Aug-2008	3
2	Aged Care Network	Dementia	Nov 2010	2
3	Aged Care Network	Delirium	August 2008	2
4	Aged Care Network	Geriatric Evaluation & Management (GEM)	Aug-2008	3
5	Aged Care Network	Orthogeriatric	Dec-2007	3
6	Aged Care Network	Parkinson's Disease Services	Dec-2007	2
7	Aged Care Network	Rehabilitation and Restorative Care Services	Dec-2007	3
8	WA Cancer & Palliative Care Network	Adolescent and Young Adult Cancer	Pending Endorsement	N/A
9	WA Cancer & Palliative Care Network	Bladder	Pending Endorsement	N/A
10	WA Cancer & Palliative Care Network	Bone and Soft Tissue Sarcoma	Pending Endorsement	N/A
11	WA Cancer & Palliative Care Network	Breast Cancer	Jan-2009	2
12	WA Cancer & Palliative Care Network	Cancer	Jul-2008	2
13	WA Cancer & Palliative Care Network	Colorectal Cancer	Nov-2008	2
14	WA Cancer & Palliative Care Network	Gynaecologic Cancer	Jan-2009	3
15	WA Cancer & Palliative Care Network	Haematology Malignancy	Jan-2009	2
16	WA Cancer & Palliative Care Network	Head and Neck Cancer	Sep-2009	2
17	WA Cancer & Palliative Care Network	Integrated Primary Care & Cancer Services	Nov-2008	2

	Network	Model of Care	Date endorsed/noted by SHEF	Level of Implementation
18	WA Cancer & Palliative Care Network	Neuro-Oncology	Jul-2007	2
19	WA Cancer & Palliative Care Network	Psycho-Oncology	Nov-2008	2
20	WA Cancer & Palliative Care Network	Skin Cancer: Cutaneous Malignant Melanoma	Pending endorsement	N/A
21	WA Cancer & Palliative Care Network	Testicular Cancer	Pending endorsement	N/A
22	WA Cancer & Palliative Care Network	Thoracic Cancer	Dec-2008	2
23	WA Cancer & Palliative Care Network	Thyroid Cancer	Pending endorsement	N/A
24	WA Cancer & Palliative Care Network	Upper Gastro-intestinal Cancer	Nov-2009	2
25	WA Cancer & Palliative Care Network	Urological Cancer (Prostate, Penile and Bladder)	Pending endorsement	N/A
26	WA Cancer & Palliative Care Network	Testicular Cancer	Pending endorsement	N/A
27	Palliative Care Network	Palliative Care – including Rural Palliative Care	Oct-2008	3
28	Palliative Care Network	Paediatric and Adolescent Palliative Care	Sept-2009	3
29	Cardiovascular Health Network	Abdominal Aortic Aneurysm	Nov-2008	3
30	Cardiovascular Health Network	Acute Coronary Syndromes in Western Australia	May-2009	2
31	Cardiovascular Health Network	Heart Failure	Aug-2008	2
32	Child and Youth Health Network	Fetal Alcohol Spectrum Disorder	Nov 2013	3
33	Diabetes & Endocrine Health Network	Diabetes	Jan-2008	2
34	Diabetes & Endocrine Health Network with Cardiovascular Health Network	High Risk Foot	Dec-2010	2

	Network	Model of Care	Date endorsed/noted by SHEF	Level of Implementation
35	Digestive Health Network	Home Enteral Nutrition	Dec-2010	1
36	Falls Prevention Health Network	Falls Prevention Model of Care for the Older Person	Feb-2014	3
37	Familial Hypercholesterolaemia Australasia Network Consensus Group	Familial Hypercholesterolaemia: A Model of Care for Australasia	Publication not noted.	3
38	Infections & Immunology	Hepatitis C Virus	Dec-2009	2
39	Infections and Immunology Health Network	Anaphylaxis	Sep-2013	1
40	Infections and Immunology Health Network	Human Immunodeficiency Virus (HIV)	Mar-2008	2
41	Infections and Immunology Health Network	Sexually Transmitted Infections	Dec-2007	2
42	Injury and Trauma Health Network	Burn Injury	May-2009	3
43	Morbid Obesity Health Network (limited one time network)	WA Morbid Obesity	May-2008	3
44	Musculoskeletal Health Network	Elective Joint Replacement Service	Nov-2010	3
45	Musculoskeletal Health Network	Inflammatory Arthritis	Jun-2009	1
46	Musculoskeletal Health Network	Osteoporosis	Aug-2011	2
47	Musculoskeletal Health Network	Service Model for Community-based Musculoskeletal health in Western Australia	Nov-2013	2

	Network	Model of Care	Date endorsed/noted by SHEF	Level of Implementation
48	Musculoskeletal Health Network	Spinal Pain	Apr-2009	3
49	Neurosciences and the Senses Health Network	WA Epilepsy Services	Feb-2008	1
50	Neurosciences and the Senses Health Network	Motor Neurone Disease Services for Western Australia	May-2008	1
51	Neurosciences and the Senses Health Network	Otitis Media	Jan-2013	2
52	Neurosciences and the Senses Health Network	Model of Stroke Care	May-2012	2
53	Renal Health Network	Chronic Kidney Disease	Dec-2007	3
54	Respiratory Health Network	Asthma	Aug- 2012	2
55	Respiratory Health Network	Chronic Lung Conditions	Aug-2012	2
56	Respiratory Health Network	Chronic Obstructive Pulmonary Disease	Aug- 2012	2
57	Respiratory Health Network	Cystic Fibrosis	Sep-2013	2
58	Respiratory Health Network	Sleep Disorders	Apr-2010	2

Aged Care Network

Amputee Services and Rehabilitation

Dementia and Delirium

Geriatric Evaluation and Management

Orthogeriatric

Parkinson's Disease

Rehabilitation and Restorative Care Services

Model of Care:	Amputee Services and Rehabilitation
Network responsible:	Aged Care Network
Endorsed/noted by SHEF:	August 2008

Introduction

The purpose of the Model is to provide an equitable and high quality service for amputee patients and their carers as they progress through the continuum of care. The Model is designed to take into account the needs of younger amputee patients. A key consideration was the flexibility of services in supporting the amputee patient and carer to live independently in the community.

Linked Models of Care:

- Model of Care for the Older Person
- Rehabilitation and Restorative Care Services Model of Care.

The Model contains recommendations or objectives that support interdisciplinary care for amputee patients across the continuum of care commencing with early post-operative assessment to care coordination post discharge in order that as many patients as possible can live independently in the community.

Area Health Services are responsible for implementation of the Model and in partnership with the Aged and Continuing Care Directorate are responsible for the overall monitoring of the Model.

The Aged Care Network collaborates with key partners across the health system to implement the recommendations of the Model.

The Model outlines six key recommendations to shape clinical service delivery.

Achievements

- Establishment of outreach multi-disciplinary amputee specialist rehabilitation clinics at all metropolitan tertiary hospital sites.
- Increased recognition of tertiary sites of the need to provide multi-disciplinary outpatient based care by tertiary sites.
- Introduction of an interdisciplinary care checklist.
- Care Coordination Service that provides pre and post discharge care.
- Mobile Outreach Team to rural and remote areas providing education for allied health staff and support for patient and carers.

Challenges

Five of the six recommendations were achieved.

Formal agreement between WA Country Health Services (WACHS) and metropolitan level 5 and 6 hospitals regarding organisation partnerships and the distribution of orthogeriatric services across WA to: facilitate transfer arrangements, early discharge and, formalised care support between partnering metropolitan and rural hospitals, which is contingent upon WA Health Executive agreement and has not been agreed to date.

It will be a challenge to recognise the value of non-admitted subacute care rehabilitation services as the demand for acute hospital services increases and the Activity Based Funding (ABF) model is rolled out.

Future Priorities

- A sub-acute transitional care facility such as a “Well-tel” to be established at the State Rehabilitation Centre post 2014.
- Maintain or improve existing Amputee admitted and non-admitted services according to demand.

Conclusion

Overall, progress in the implementation of the Model has been good. Key components in promoting good patient care have been achieved. A key achievement of this Model has been the education of allied health workforce in country regions regarding amputee rehabilitation management.

Level of Implementation

Level 3: Substantial implementation

Models of Care:	Dementia and Delirium Models of Care
Network responsible:	Aged Care Network
Endorsed/noted by SHEF:	August 2008 – Delirium, Late 2010 – Dementia

Introduction

The primary purpose of the Models of Care for Dementia and Delirium (Models) is to provide health service environments and related services with a guide to work towards good practice for improving and implementing dementia and delirium care services. The Models are viewed as sister documents, with recommendations aligning to include best practice frameworks; carers as partners in care; and workforce education and training. Screening and identifying cognitive impairment, along with the importance of differential diagnosis and pathways of care are core aspects of the Models, along with a shared vision of age friendly environments.

The Models are outputs of the Aged Care Network and the overarching Model of Care for the Older Person in WA. These Models align with the National Framework for Action on Dementia, and are supported through the WA Aged Care Advisory Council (WAACAC). Implementation is monitored through the Aged and Continuing Care Directorate (ACCD).

Achievements

- The WAACAC continues to support the ACCDs work related to the Models. WAACAC nominated dementia as a priority in 2011.
- The ACCD has maintained pro-active engagement as WA Health’s representative on the national Dementia Working Group. This includes active participation and support in the development of the new National Framework for ACTION on Dementia 2014 – 2018.
- The recommendations from the Models are foundation documents to strategies targeting areas including:
 - Patients with cognitive impairment in hospitals.
 - People with dementia and community services.
 - Younger onset dementia – working in collaboration with the Alzheimer’s Australia WA (AAWA) Young Onset Dementia Reference group to support awareness and actions.
- The Dementia Partnership Program: In partnership with WA Health and AAWA has implemented a community sector dementia awareness and dementia service improvement program. Planning was completed through 2013/14 and in 2014 the program commenced. The program targets awareness of dementia across the community care sector, focussing initially on Home and Community Care (HACC) and organisations and workforce, to strengthen assessment of need and delivery of support to people with dementia.

- In 2014, the recommendations and principles from the Models were combined into a single framework document that focuses attention onto acute hospitals and patients with cognitive impairment. The emphasis is on leveraging improvements using quality processes, acknowledging that cognitive impairment is currently being mapped into national quality standards.
- Emergency Department Care Coordination Teams are working with a consistent risk screening process and tool that includes cognitive impairment. The aim is early screening for cognitive impairment to enable timely assessment and intervention.
- Dementia and delirium have been afforded positive attention through forums including:
 - WACHS meetings of aged care managers and Older Person Initiative (OPI) workers.
 - Aged Friendly Principle training across WA hospitals includes cognitive impairment as a core area.
 - Training in Sub Acute Care delirium training and education.
 - ACCD staff visiting multiple health and community agencies emphasising the importance of dementia and delirium care pathways.
 - Continued funding to the AAWA to deliver dementia dedicated service and education programs into public hospitals.
 - WA engagement in national forum consultations for the Cognitive Impairment Project that aims to embed cognitive impairment into nation quality standards for acute care.

In Progress

- For community, the Dementia Partnership Program will continue to expand through 2014/15 to become a recurrent initiative delivered through the AAWA. The DPP reports through the (HACC) program managed through the ACCD.
- Through 2014/15 the ACCD will complete and progress the document Hospitals in Western Australia: Patients with cognitive impairment. A framework for improvement. This is an important strategy that is based on recommendations from the Models, and that pre-empts current national work that will see cognitive impairment embedded into national standards. This document is in development with input from an expert reference group, and it includes a workbook that will be a quality tool for hospital managers and clinicians.

Challenges

There is broad consensus that there is much to be done in hospitals in relation to dementia and delirium, and this is the focus of work through 2014/15. Challenges include increasing awareness of hospital managers to the impact and cost of cognitive impairment to the individual and to the health system, and that action is required. Achieving consistent and systematic screening and assessment, along with dementia friendly practice and environments are specific and pivotal. Systematic data collection through ABF collections is likely to remedy some of the absence of systematic data related to cognitive impairment in hospitals.

It remains, that preventing delirium and preventing the onset of behavioural and psychological symptoms of dementia should be considered imperatives by hospitals. Strengthening partnerships with services such as Older Adult Mental Health and the Dementia Behaviour and Management Advisory Service are essential in this area.

Workforce awareness across health and community care is a significant and ongoing challenge. This is being addressed in part through Commonwealth and State funding to the AAWA, however there are considerable challenges for hospital environments.

Future Priorities

The current priority is effecting improvements in hospitals using quality standards merged into a framework for improvement.

Conclusion

The Models in combination continue to provide a framework for the Aged Care Network to progress focussed initiatives in the community and hospitals. It can be used by health services as a best practice reference when developing and improving practice in the area of cognitive impairment, and the combined recommendations provide a framework against which to gauge improvement.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Geriatric Evaluation and Management
Network responsible:	Aged Care Network
Endorsed/noted by SHEF:	August 2008

Introduction

The purpose of the Model is to address key gaps in equity of access to admitted and non-admitted geriatric evaluation and management (GEM) services across the state in identified settings. The rationale is so the older person is able to retain mobility and functional independence for the maximum period possible and in the preferred residential setting.

The objectives were also to provide cost-effective care, reductions in inpatient length of stay, fewer inappropriate discharges and reductions in readmissions to hospital.

Linked Models of Care:

- Model of Care for the Older Person
- Rehabilitation and Restorative Care Services Model of Care

The Model contains recommendations relating to the establishment of dedicated inpatient GEM Units at all metropolitan tertiary hospital sites. The Model also requires the development of GEM models of care that focuses on non-admitted Day Therapy Centre service delivery.

Area Health Services are responsible for implementation of the Model and in partnership with the Aged and Continuing Care Directorate are responsible for the overall monitoring of the Model.

The Aged Care Network collaborates with key partners across the health system to implement the recommendations of the Model.

The Model outlines eight key recommendations to shape service delivery and promote system wide improvements to the provision of GEM service delivery models and accompanying infrastructure.

Achievements

1. Six of the eight recommendations were achieved.
2. Establishment of inpatient GEM units at tertiary hospital sites in the metropolitan area.
3. Strengthening of GEM services in Day Therapy Units attached to tertiary and secondary hospitals.
4. Strengthening and enhancement of ambulatory care rehabilitation options across the state, including rehabilitation in the home, and day therapy services where the services support a patient discharged from a hospital based GEM Unit.
5. Expansion and consolidation of outreach geriatric evaluation and management visiting services to rural and remote regions of the state.
6. Establishment of Statewide Subacute Care Training and Development Centre that promotes the role of geriatric evaluation and management in multi-disciplinary rehabilitation care.

Challenges

Challenges include:

- Funding source for the establishment of inpatient GEM Units at level 5 hospitals where an emergency department is located.
- Funding source for the establishment of inpatient GEM Units at Regional Resource Centres.
- Workforce availability to support establishment of GEM Units.

Future Priorities

- GEM inpatient units should be established in Tertiary (level 6) Hospitals and in level 5 hospitals where emergency departments are located.
- In rural and remote areas, GEM should be established in Regional Resource Hospitals where an emergency department is located.

Conclusion

Overall, progress in the implementation of the Model has been positive. Three metropolitan tertiary level hospitals have dedicated inpatient GEM Units.

The goal to provide equity of access to downstream support services in the community that support a GEM model of care has also been achieved.

Education of allied health workforce in country regions regarding the role of geriatric evaluation and management has also been a key achievement.

Level of Implementation

Level 3: Substantial implementation

Model of Care:	Orthogeriatric Model of Care
Network responsible:	Aged Care Network
Endorsed/noted by SHEF:	December 2007

Introduction

The purpose of the Orthogeriatric Model of Care was to address service delivery for the older person presenting with fragility fractures in the tertiary care environment. Primary and secondary care for the “at risk” older person and younger person is also included.

Hip fractures are the main focus, however, management of fragility fractures are also included. The touchstone of the Model is the collaborative approach between orthopaedic and geriatric services for the care of older people with fractures.

Linked Models of Care:

- Model of Care for the Older Person
- Geriatric Evaluation and Management Model of Care
- Rehabilitation and Restorative Care Rehabilitation Services Model of Care

The Model contains recommendations or objectives that support the adoption of an Orthogeriatric Model of Care as best practice, recruitment and development of a workforce to support the Model, role of geriatric management for fragility fractures not requiring surgery, appropriate configuration of services, range of rehabilitation options, linkages between rural and metropolitan services, introduction of a Pictured Archived Scheme to support regional centres and expansion of ambulatory care rehabilitation programs to support the older person on discharge.

Area Health Services are responsible for implementation of the Model and in partnership with the Aged and Continuing Care Directorate are responsible for the overall monitoring of the Model.

The Model outlines 10 key recommendations to shape service delivery and promote system wide improvements to processes and infrastructure.

The Aged Care Network collaborates with key partners across the health system to implement the recommendations of the Model.

Achievements

- Nine of the 10 recommendations were achieved.
- Achievement of a shared care model in acute tertiary hospitals.
- Strengthening and enhancement of ambulatory care rehabilitation options across the state.
- Strengthening of multi-disciplinary rehabilitation workforce across the state.
- Significant improvements to data collection and reporting.
- Statewide Subacute Care Training and Development Centre.

Challenges

- Formal agreement between WACHS and metropolitan level 5 and 6 hospitals regarding organisation partnerships and the distribution of orthogeriatric services across WA to facilitate transfer arrangements, early discharge and formalised care support between partnering metropolitan and rural hospitals.
- Recognition of the value of non-admitted subacute care rehabilitation services as demand for acute hospital services increases and the introduction of the ABF funding model occurs over time.

Future Priorities

- Recruitment and development of a workforce to support the WA orthogeriatric model (complementing orthopaedic services). This should include:
 - orthogeriatrician coverage of level 5 and 6 hospitals on a 9 hour/ 7 days a week basis (or all metropolitan hospitals where non-elective orthopaedic surgery services are available)
 - geriatrician coverage of Aged Care Rehabilitation Units (ACRUs) as well as regional resource centres (through visiting services and telehealth technology)
 - multi-disciplinary rehabilitation teams (geriatrician-led) available at metropolitan ACRUs and at regional resource centres
- A formal agreement is required between the WACHS and metropolitan level 5 and level 6 hospitals regarding organisational partnerships and the distribution of orthogeriatric care services across WA. This should facilitate access and improved pathways of care for rural patients through:
 - Expedited transfer arrangements from rural to metropolitan hospitals
 - Early return to rural centres for rehabilitation services
 - Formalised care support arrangements between partnering metropolitan and rural hospitals.

Conclusion

Overall, progress in the implementation of the Orthogeriatric Model of Care has been positive. Key components in promoting good patient care have been achieved, particularly in regards to the shared care model in the tertiary hospitals. Key gaps in rehabilitation service provision across regional resource centres have been addressed in both the admitted and non-admitted setting. Education of allied health workforce in country regions regarding orthogeriatric rehabilitation management has also been a key achievement.

Level of Implementation

Level 3: Substantial implementation

Model of Care:	Parkinson's Disease Services
Network responsible:	Aged Care Network
Endorsed/noted by SHEF:	December 2007

Introduction

The purpose of the Parkinson's Disease Services Model of Care was not to advocate fundamental changes to the way services were configured, instead it sought to build and capitalise on the existing framework of service delivery.

The Model proposed a strengthening of services that are provided at the specialist clinics operating north and south of the river at Osborne Park Hospital and Fremantle Hospital, Moss Street Clinic. It proposed an extension of similar services to the East Metropolitan area and the Mandurah region through an outreach mobile service.

Strengthening of clinical services to the rural and remote regions of WA is also promoted.

Also a key feature was improvements in diagnosis and management of people with Parkinson's Disease in the acute sector.

Linked Models of Care:

- Model of Care for the Older Person
- Rehabilitation and Restorative Care Model of Care

The Model contains recommendations or objectives that support multi-disciplinary care across the continuum of care, appropriate configuration of services, range of rehabilitation options, linkages between rural and metropolitan services and continuous improvement of the workforce through education and training.

Area Health Services are responsible for implementation of the Model and in partnership with the Aged and Continuing Care Directorate are responsible for the overall monitoring of the Model.

The Aged Care Network collaborates with key partners across the health system to implement the recommendations of the Model.

The Model outlines 24 key recommendations to shape service delivery and promote system wide improvements to processes and infrastructure.

Achievements

- Fourteen of the 24 recommendations have been achieved
- Establishment of Centre for Excellence at Fremantle Hospital, Moss Street Clinic.
- Establishment of full multi-disciplinary team at Fremantle site, including consultant neurologist and geriatrician.
- Establishment of mobile outreach specialist multi-disciplinary clinics at Armadale, Bentley, Rockingham and Peel.
- Establishment of a specialist multi-disciplinary team based at Swan Districts Hospital to service the east metropolitan region.

- Outreach specialist geriatric evaluation and management visiting service to rural and remote regions of the state that included consultation and diagnosis for Parkinson's Disease.
- Significant Day Therapy Unit expansion across metropolitan and rural sites that support clinics and patients with Parkinson's Disease.
- Significant improvements to data collection and reporting, particularly in the non-admitted sector.
- Statewide Subacute Care Training and Development Centre dedicated to improving the skills development across the allied health workforce.

Challenges

- Local Area Health Service decision making to dismantle parts of service models. As a result, service development over a four year period has been compromised.
- Sustainability under an ABF funding model has been determined. However, local Area Health Service decision making has determined that patient needs are outweighed by extraneous financial decisions.
- Recognition of the value of non-admitted subacute care rehabilitation services as demand for acute hospital services increases and the drive to develop a sustainable ABF funding model.

Future Priorities

Maintain or improve existing Parkinson's Disease admitted and non-admitted services according to demand.

Conclusion

Overall, progress in the implementation of the Model has been positive. Key components in promoting good patient care have been achieved. Key gaps in service provision were addressed, however this has now been compromised through dismantling of parts of the outreach mobile service.

Education of allied health workforce in country regions regarding Parkinson's Disease rehabilitation management has also occurred.

Level of Implementation

Level 2: Partial implementation

Model of Care:	Rehabilitation and Restorative Care
Network responsible:	Aged Care Network
Endorsed/noted by SHEF:	December 2007

Introduction

The purpose of the Model of Care was to address key gaps in equity of access to admitted and non-admitted rehabilitation and restorative care services across the state. The rationale is so that the older person is able to retain mobility and functional independence for the maximum period possible and in the preferred residential setting. The objectives were also to provide cost-effective care, reductions in inpatient length of stay, fewer inappropriate discharges and reductions in readmissions to hospital.

In addition, the need to reform a range of system wide process issues (e.g. coordinated multi-disciplinary care, training and skills development and data collection) were also part of the Model.

Linked Models of Care:

- Model of Care for the Older Person
- Geriatric Evaluation and Management Model of Care
- Orthogeriatric Model of Care
- Amputee Rehabilitation Services Model of Care

The Model contains recommendations or objectives that support multi-disciplinary care across the continuum of care, appropriate configuration of services, range of rehabilitation options, incorporation of geriatric medicine assessment and management in the care of the older person, linkages between rural and metropolitan services and continuous improvement of the workforce through education and training.

Area Health Services are responsible for implementation of the model and in partnership with the Aged and Continuing Care Directorate are responsible for the overall monitoring of the Model.

The Aged Care Network collaborates with key partners across the health system to implement the recommendations of the Model.

The Model outlines 22 key recommendations to shape service delivery and promote system wide improvements to processes and infrastructure.

Achievements

- Twenty of the 22 recommendations were achieved.
- Strengthening and enhancement of ambulatory care rehabilitation options across the state.
- Strengthening of multi-disciplinary rehabilitation workforce across the state.
- Day Therapy Unit reform to promote consistency and equity of service across the state
- Day Therapy Unit services expansion across the state.
- Outreach geriatric visiting service to rural and remote regions of the state.
- Significant improvements to data collection and reporting.
- Statewide Subacute Care Training and Development Centre.

Challenges

- Formal agreement between WACHS and metropolitan level 5 and 6 hospitals regarding organisation partnerships and the distribution of rehabilitation services across WA to facilitate transfer arrangements, early discharge and formalised care support between partnering metropolitan and rural hospitals is contingent upon WA Health executive agreement and has not been agreed to date.
- Recognition of the value of non-admitted subacute care rehabilitation services as demand for acute hospital services increases and the introduction of the ABF funding model occurs over time.

Future Priorities

Maintain or improve existing rehabilitation admitted and non-admitted services according to demand.

Conclusion

Overall, progress in the implementation of the Model has been positive. Key components in promoting good patient care have been achieved. Key gaps in rehabilitation service provision across regional resource centres have been addressed in both the admitted and non-admitted setting. Education of allied health workforce in country regions regarding rehabilitation management has also been a key achievement.

Level of Implementation

Level 3: Substantial implementation

WA Cancer & Palliative Care Network

Cancer

Adolescent and Young Adult Cancer

Bladder

Bone and Soft Tissue Sarcoma

Breast Cancer

Colorectal Cancer

Gynaecologic Cancer

Haematology Malignancy

Head and Neck Cancer

Integrated Primary Care & Cancer Services

Neuro-Oncology

Psycho-Oncology

Skin Cancer: Cutaneous Malignant Melanoma

Testicular Cancer

Thoracic

Thyroid

Upper Gastro-Intestinal Cancer

Urological Cancer (Prostate, Penile and Bladder)

Palliative Care (including Rural Palliative Care, Paediatric and Adolescent Palliative Care)

Model of Care:	Cancer
Network responsible:	WA Cancer & Palliative Care Network (WACPCN)
Endorsed/noted by SHEF:	July 2008

Introduction

The Cancer Model of Care proposes a specialist led cancer care system that enables high volume, low risk cancer care to occur as close to the patients home as is safe to do so. It suggests a specialist cancer care system that enables high volume, low risk cancer care to occur away from comprehensive cancer centres whilst maintaining the quality of outcomes that are currently achieved within WA. It recommends a strategic state-wide linking of all public cancer services in order to improve the care delivered to Western Australian cancer patients.

The aim of the Model is best practice care and services within a health care system for a person or population group as they progress through stages of a condition, injury or event. The broad objective is ensuring people get the right care, at the right time, by the right team and in the right place.

The Model makes 12 recommendations for the delivery of cancer care and proposes that the implementation of these recommendations be phased according to resource needs and further planning and development. The individual tumour specific Models are to be used in conjunction with this overarching Model.

Achievements

- Enhanced services have been provided to some regional areas with the increase in visiting medical specialists from the public and private sector.
- Multidisciplinary Team Meetings continue to develop in most tumour groups in the tertiary setting and in some regional sites improving the treatment options for patients and providing peer review to ensure quality practice.
- Improved collaboration and networking has occurred with the multidisciplinary tumour collaboratives developing the tumour specific models of care.
- The impact on planning, workforce, policy development and service delivery has been significant as all health regions use these models of care to inform their planning processes.
- The multidisciplinary nature of engagement across all regions and sectors has led to a collective understanding of specialist led care close to home which is different to tertiary facility controlled care.
- The financial benefits have primarily been for the rural patients with increasing visiting medical specialists, saving the patients/time, inconvenience and enabling the patients to have their family of carers involved and supporting them through their cancer journey. Increasingly coordinated care has reduced the need for multiple visits during the treatment and diagnosis trajectory.

- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models.
- FSH planning has been built around the Models.
- The Survivorship Research project is proceeding well with a number of committee groups involving people from WA and interstate being formed. The project will start with only a specific cohort of haematology patients recruited from SCGH. The information gained from this project will help to inform the development of a survivorship clinic for haematology patients. This project is a collaboration between WACPCN, SCGH and the University of Notre Dame.

In Progress

- Some of the tumour specific models of care are still under development and some are in the process of being updated.
- The outcome data base is still being developed by Health Information Network – this will enable WA Health to know the outcomes for each person diagnosed and treated for cancer including the most effective treatment pathways.
- The Cancer Nurse Coordination team has been so successful that other states and countries are following the WA model.
- Ongoing mapping of services and business cases for additional services including metastatic breast cancer, sarcoma and Aboriginal cancer care are in progress.
- Improving MDTs in all tumour groups and regional areas is ongoing
- Provision of written care plans to the patient, their family physician and the treatment team continues to be developed.
- Introduction of an oncology information management system for SCGH Cancer Centre and Perth Childrens Hospital (PCH). WACPCN is an integral part of this project assisting in the support of new resources and future development of services.
- Development of Paediatric Survivorship Transition into Adult Services Model of Care is in development.
- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA Cancer Nurse Coordination service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.
- Reviewing pathways of care. This review has come about due to the development of FSH, MH and the reconfiguration of RPH.

Challenges

- Lack of integrated oncology information management.
- Attracting specialist oncologists to regional cancer units will be a challenge given the wide variety of specialists needed and the small number of individual tumours in some regions. A permanent mechanism to fund outreach by the tertiary specialists needs to be found to improve regional and rural outcomes.
- Cancer diagnostic and treatment services are extremely expensive and as the majority of this activity is done in an outpatient or ambulatory setting, private health insurance does not apply. The Commonwealth Safety Net program is available, however modern

treatments often carry over calendar years and only cover 80 per cent of the gap in services in that year. Therefore many patients in the private sector and in the public sector in country WA are many thousands of dollars out of pocket. Some patients' access private services due to the often long wait for the initial outpatient consultation in the public sector, these waiting times can impact significantly on the prognosis. The same treatment regimes in the tertiary facilities have no out of pocket expenses therefore equity of access to free public health care is not available for many West Australians.

Future Priorities

The WA Cancer Chemotherapy Credentialing Framework 2011 will support the aim to increase the number of patients able to receive chemotherapy closer to home. This Framework is designed for services currently providing chemotherapy as well as services planning to (re)commence chemotherapy provision.

The Framework will provide a common structure to promote a coordinated approach in assisting the development and implementation of systems for the credentialing and competency assessment of individuals involved in the delivery of cancer chemotherapy care.

Conclusion

Cancer care in WA continues to develop in line with international best practice. WACPCN facilitates a strong platform for evidence based care delivery utilising current Models and treatment pathways. Safe high quality cancer care delivered by a collaborative team approach enables efficient and effective care delivery approaches.

While progress has been made with regard to the implementation of recommendations in the Model, there are a number of factors affecting implementation, in particular funding for resources and workforce issues.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Adolescent and Young Adult Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	Pending Endorsement

Introduction

The Model of Care for Adolescent and Young Adult Cancer (AYA) aims to provide the most appropriate clinical care for AYA cancer treatment. The Model encompasses a uniform approach in order to work in partnership with adult and paediatric services to improve the coordination and delivery of age-appropriate and psychosocial care for AYA patients.

The Model aims to:

- Define and establish the necessary age-appropriate clinical services for AYA patients with cancer
- Reduce the incidence and mortality of AYA patients from cancer
- Improve outcomes and patient satisfaction with care
- Ensure quality of service provision
- Facilitate access for AYA patients to age-appropriate care, regardless of the setting of care
- Establish partnerships between cancer care, primary care and other providers involved in AYA cancer care
- Increase access to AYA support services and, access to and enrolment in clinical trials.

Key to the implementation of this Model is the development of a cancer service dedicated and specific to AYA patients in WA. The 22 key recommendations are focused on addressing the needs of AYA cancer patients and strengthening clinical service delivery. Specific Cancer Models of Care for example Haematologic Malignancy, Neuro-Oncology Cancer and the Sarcoma Model of Care, address more specific aspects of medical care, and should be referred to in conjunction with this Model.

Conclusion

This Model of Care written in August 2013 is the first Model of Care for AYA and is currently being endorsed by the Principal Medical Advisor of the WA Cancer and Palliative Care Network prior to being presented to SHEF.

Model of Care:	Bladder
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	Pending Endorsement

Introduction

Urothelial Cancers account for approximately 11 per cent of all urological cancers diagnosed in WA. Male diagnoses outnumber those of females approximately 3:1. This Model of Care covers the treatment of Bladder Cancer and is further separated into muscle-invasive and non-muscle invasive sections.

The Model draws together the evidence in relation to best practice and in consultation with key stakeholders and Tumour Collaboratives makes recommendations to ensure efficient referral pathways with effective clinical management state-wide. It places particular emphasis on supportive care needs for patients in particular the generic supportive needs of all cancer patients as identified in the Urological Model of Care.

The WA Cancer and Palliative Care Network Model of Cancer Care 2008 and the Model of Care for Urological Cancer 2009, provides the basis for this tumour site-specific Model.

Achievements

As per the Urological Model of Care 2009

- The urology Cancer Nurse Coordination (CNC) service is accepted as key members of the Multidisciplinary team on each of three tertiary sites – Sir Charles Gardiner Hospital (SCGH), Royal Perth Hospital (RPH) and Fremantle Hospital (FHHS). Upon opening in 2015 the Fiona Stanley Hospital (FSH) will also see the creation of an additional Multidisciplinary Team.
- Collaborative partnerships formed with Cancer Nurses Society of Australia, Society of Urological Nurses of Western Australia and Australian and New Zealand Urogenital Prostate Cancer Clinical Trials Group.

Challenges

- Large number of patients requiring long term surveillance.
- Coordinating care of patients who live remotely in WA (including Christmas and Cocos Islands) adds to complexity of developing individualised plans.

Future Priorities

Delivering and publicising care pathways to support care closer to home where safe to do so.

Conclusion

The Model written in 2010 then reviewed and updated in 2013 by Tumour Collaboratives and key stakeholders, is the first Model of Care for Bladder Cancer. It is currently pending endorsement by the Principal Medical Advisor of the WA Cancer and Palliative Care Network prior to being presented to SHEF.

Model of Care:	Bone and Soft Tissue Sarcoma
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	Pending Endorsement

Introduction

The Model of Care for Bone and Soft Tissue Sarcoma 2009, developed by a working group of experts and tumour collaboratives, describes the current situation and best practice evidence based strategies where available, across the continuum of care. Sarcomas are a complex collection of diseases to diagnose and treat, and represent a significant burden to patients and their families, the health system and the community at large.

This Model designates how sarcoma care should be delivered in WA and describes the patient centred journey that provides safe, quality, evidence based and multidisciplinary care resulting in optimum outcomes. The Model integrates primary care, supportive care, psycho-oncology and palliative care.

The WA Cancer and Palliative Care Network Model of Care for Cancer 2008 provides the basis for this tumour site specific Model. The Model makes a key recommendation to improve data collection.

Future Priorities

- Delivering and publicising care pathways to support care closer to home where safe to do so.
- Development of the Sarcoma Nurse Coordinator role to facilitate coordinated care.

Conclusion

This Model written in 2009 and reviewed and updated in 2012 by key stakeholders and Tumour Collaboratives is a first Model of Care for Bone and Soft Tissue Sarcoma. It is currently being endorsed by the Principal Medical Advisor of the WA Cancer and Palliative Care Network prior to being presented to SHEF.

Model of Care:	Breast Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	January 2009

Introduction

This Model outlines the management and care of breast cancer in WA. It is designed to be a statement defining best practice care and services within the health care system for a person with breast cancer at each stage of the condition. The WA Cancer and Palliative Care Network Model of Care for Cancer 2008 provides the basis for this tumour site-specific Model. The Breast Cancer Model of Care:

- discusses the potential of screening in reducing breast cancer incidence, identifies screening programs for women with both average and higher than average risk of developing breast cancer, and outlines symptoms that require further investigation by the general practitioner
- outlines the diagnosis and referral process required to confirm the diagnosis of cancer and assess the extent (staging) of the disease
- plans the type of treatment that will be delivered, who will provide it and where it should be provided, and
- provides a series of steps for the management of patients who have recurrence of the disease (local or metastatic) and further treatment.

Evidence demonstrates that breast cancer survival is improved when management is in a multidisciplinary team (MDT) care setting. The Model recommends that patients should have MDT access to plan the management of their cancer with a cancer specialist leading multidisciplinary approach. It also recommends that a clearly documented plan of surveillance should be established to monitor the adjuvant patient following initial treatment and be available to the patient.

Achievements

- MDTs and regular MDT meetings are well established in several metropolitan hospitals and in Bunbury.
- Review of appropriate surgical sites with recommended action across WA.

In Progress

- Development of appropriate survivorship plans.
- Enhanced support for patients diagnosed with metastatic breast cancer.

Challenges

- Providing appropriate support to rural cancer surgeons via regular video conferencing and MDT's to improve clinical outcomes in line with evidence.
- Technologies such as lymphoscintigraphy and sentinel lymph node biopsies result in additional costs in the short term. The advances have, however, led to greater patient satisfaction, less morbidity by reducing cases of lymphoedema for example and better quality of life. Equality of access to these technologies remains a challenge.

- In cases where breast conserving surgery is not indicated, or where mastectomy is the preferred option of the woman, many patients request breast prosthesis or reconstruction and this also requires additional surgical time, expertise and overall expense. Agreed Pathways across WA are not yet established

Future Priorities

- The additional demands upon surgical expertise, time, coordination and cost which reconstructive breast surgery brings are significant factors to consider when planning surgical oncology services for the future. These cases are now quite often performed by breast surgeons and plastic and reconstructive surgeons operating together or in sequence during the same general anaesthetic.

Conclusion

The eight recommendations identified in the Model have been addressed to varying degrees through a three pronged approach of a) prevention b) primary health care and c) specialist care. Currently, there are no plans to update this Model of Care.

Level of Implementation
Level 2: Partial Implementation/

Model of Care:	Colorectal Cancer
Network responsible:	WA Cancer & Palliative Care Network (WACPCN)
Endorsed/noted by SHEF:	November 2008

Introduction

The goal of the WA Colorectal Cancer Model of Care is to establish best practice care, including provision of services, for a person diagnosed with colorectal cancer in WA. The early detection of colorectal cancer, especially at an asymptomatic stage, is associated with improved patient outcomes. To this end, the WACPCN supports the National Bowel Cancer Screening Program (NBCSP) recommending organised screening for faecal occult blood testing for all Australians over 50 years of age every 2 years.

The Model of Care for Cancer 2008 provides the basis for this tumour site specific Model. The model outlines 4 key recommendations to shape clinical service delivery in the areas of prevention, clinical care, data collection and education across various clinical and non-clinical settings. Special consideration is given to early prevention through screening of the NBCSP, coordination of referral pathways and follow up care.

Achievements

- Ongoing success of the gastro referral pathway with FHHS, Kaleeya, Armadale Health Service and Rockingham General Hospital (RGH).
- Introduction and implementation of a gastroenterology referral pathway at RPH.
- Consistent referrals from SCGH medical and radiation oncology departments to CNC service.
- Expansion of the National Bowel Screening Program – implementation of a biennial screening interval by 2020.
- Enhanced services have been provided to some regional areas with the increase in visiting medical specialist from the public to private sector.
- Multidisciplinary Team Meetings are now common in the tertiary settings and some regional sites, improving the treatment options for patients and providing peer review to ensure quality practice.
- FSH planning has been built around the Model.

In Progress

- The gastroenterology referral pathway has allowed all necessary investigations to take place whilst the patient is waiting to see the surgeon which in turn reduces waiting times and allows for a more streamlined treatment journey. It is anticipated that the referral pathway will be rolled out to RPH in the later part of 2014.
- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination;

allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- A state wide oncology information system would enable all patients to access the same treatment protocols – funding is unlikely to be available for this across the state.
- Attracting specialist oncologists to regional cancer units will be a challenge given the wide variety of specialists needed and the small number of individual tumours in some regions. A permanent mechanism to fund outreach by the tertiary specialists is in development.
- Cancer diagnostic and treatment services are extremely expensive and as the majority of this activity is done in an outpatient or ambulatory setting, private health insurance does not apply. The Commonwealth Safety Net program is available, however modern treatments often carry over calendar years and only cover 80 per cent of the gap in services in that year. Therefore many patients in the private sector and in the public sector in country WA are many thousands of dollars out of pocket. Some patients' access private services due to the often long wait for the initial outpatient consultation in the public sector. These waiting times can impact significantly on the prognosis. The same treatment regimes in the tertiary facilities have no out of pocket expenses therefore equity of access to free public health care is not available for many West Australians.
- Waiting times for colonoscopy are very long. A working party is developing strategies to address the waiting times.

Future Priorities

- Reviewing pathways of care. This review has come about due to the development of FSH, MH and the reconfiguration of RPH.

Conclusion

Most of the current strategies of the Colorectal Model of Care are already in place. Further progression towards achieving the recommendations requires additional funding and resourcing. Improving access of care to rural and remote areas, as well as priority groups such as Culturally and Linguistically Diverse (CALD) and Aboriginal populations provides ongoing challenges.

The supportive care by allied health staff is often limited to particular facilities or tumour groups. There are five clinical psychologists for all cancer patients (except those with breast cancer) in the state.

There needs to be Cancer Nurse Coordination visits to secondary metropolitan hospitals. Currently, limited resources in workforce does not allow for this to occur.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Gynaecologic Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	January 2009

Introduction

The Gynaecologic Cancer Model of Care provides the policy framework for the management and treatment of patients with gynaecological cancers. The Model draws together the evidence in relation to best practice and in consultation with key stakeholders makes recommendations to ensure people with gynaecological cancer receive prompt appropriate care. The model is aligned with the Model of Cancer Care 2008 which provides the basis for this tumour site specific model of care. The goal of the Model is to establish best practice care, including provision of services, for a person diagnosed with a gynaecologic cancer in WA. Underpinning this goal is the integration of primary care, supportive care, psycho-oncology and palliative care.

The development of this Model also includes reference to:

- the report from the Senate Community Affairs Reference Committee Inquiry into gynaecologic cancer in Australia 'Commonwealth Government Response to the Committee's Report: Breaking the silence: a national voice for gynaecological cancers'.
- the Centre for Gynaecological Cancers which provides a national focus to gynaecological cancer issues.

The Model outlines 11 recommendations across a continuum of care with a majority focusing on clinical service delivery. Special consideration is given to surveillance for high risk subjects.

Achievements

- Progression of Cancer Palliative Care Research and Evaluation Unit funded projects to test the feasibility of introducing routine supportive care screening across WA has commenced and will provide the data to establish guidelines for WA.
- Enhanced knowledge of rural workforce following delivery of rural education roadshows.

In Progress

- Improvement of MDTs care in regional areas is ongoing.
- Provision of written care plans to the patient, their family physician and the treatment team is also ongoing.
- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- Gynaecology in WA Health is delivered across 3 hospitals – King Edward Memorial Hospital (KEMH), SCGH and RPH. This is a complex journey requiring establishment of integrated Information Technology systems, coordinated care and clear pathways.

Future Priorities

- Increased education in care of gynaecological cancer to health professionals in outer metropolitan areas.

Conclusion

The recommendations of the Gynaecologic Model of Care have largely been implemented. This Model has commenced review by the Gynaecologic Oncology Tumour Collaborative. Once complete it will be reviewed by the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 3: Substantial Implementation

Model of Care:	Haematology Malignancy
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	January 2009

Introduction

Haematologic malignancy encompasses a diverse range of illnesses across a broad age range, with a wide variety of treatment needs. The Haematologic Malignancy Model of Care, developed by a working group of experts, describes the current situation and best practice evidence based strategies where available across the continuum of care for the management of haematologic malignancies. This Model identifies the critical issues for Haematologic Malignancy rather than a diagnosis specific model. It is a functional model which matches resource requirements (patient needs) to resource availability.

The development of the Model incorporates 5 steps to encompass a sustainable plan:

- Define the General Principles of the Model
- Develop a plan for ideal service delivery
- Develop a resource plan appropriate to the service delivery model
- Review the feasibility
- Develop a transition plan

The Model is aligned with the WA Cancer and Palliative Network Model of Cancer Care 2008 and outlines 20 recommendations to facilitate the implementation of an equitable system for Haematologic Malignant patients with a focus on clinical service delivery.

Achievements

- Hospital based education program on Haematologic Malignancy and CNC Service now an ongoing program
- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models of Care.
- Refinement and implementation of patient referral criteria and a needs assessment tool.
- Improved collaboration and networking has occurred with the multidisciplinary tumour collaboratives developing the tumour specific models.

In Progress

- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- Movement of patients between the public and private interface is a significant challenge.
- A state wide oncology information system would enable all patients to access the same treatment protocols – funding is unlikely to be available for this across the state.
- Providing rural haematology support is challenging due to limited haematology workforce and complex treatment regimes.

Future Priorities

The WA Cancer Chemotherapy Credentialing Framework 2011 will support the aim to increase the number of patients able to receive chemotherapy closer to home. This Framework is designed for services currently providing chemotherapy as well as services planning to (re)commence chemotherapy provision.

The Framework will provide a common structure to promote a coordinated approach in assisting the development and implementation of systems for the credentialing and competency assessment of individuals involved in the delivery of cancer chemotherapy care.

Conclusion

Implementation of the Model is ongoing. The 20 key recommendations identified in the Model have been addressed to varying degrees. A review of this Model is currently being undertaken by the Tumour Collaboratives and key stakeholders. Once the review process has been completed it will be sent for endorsement to the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Head and Neck Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	September 2009

Introduction

The Model of Care for Head and Neck Cancer sets out a patient-centred management service that spans the continuum of care. The Model is designed to be a statement defining best practice care and services within the health care system for a person with head and neck cancer at each stage of the condition. It highlights the patient centred journey that provides safe, high quality, evidence-based, and multi-disciplinary care thereby resulting in optimum outcomes. Underpinning this journey is the integration of primary care, supportive care, psycho-oncology and palliative care.

The WACPCN Model of Cancer Care 2008 provides the basis for this tumour site-specific Model.

The Model outlines 15 key recommendations to facilitate the implementation of an equitable system for head and neck cancer patients with a focus on evidence in relation to best national and international practice.

Achievements

- Successful planning, implementation, completion and evaluation of the rural videoconferencing education program presented to regional areas in WA on Head and Neck Cancer.
- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models.
- Improved collaboration and networking has occurred with the multidisciplinary tumour collaboratives developing the tumour specific models.

In Progress

- Improving MDT care in all tumour groups and regional areas is ongoing
- Providing written care plans to the patient, their family physician and the treatment team continues to be developed.
- Enhancing coordination of care through technology. The development of the electronic data base (DISC) will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- The complexity of treatments, continued provision of multi-site treatments for FHHS patients and lack of standardised care across hospital sites remain an ongoing challenge to the Head and Neck Cancer patients.
- Failure of the Tumour Collaborative to meet has hindered the progress of moving towards standardisation of care in WA for Head and Neck Cancer patients.

Future Priorities

- Development and publication of pathways of care.
- Exploration of robotic Ear, Nose and Throat (ENT) surgical care.

Conclusion

Implementation of the Model is ongoing. The 15 recommendations identified in the Head and Neck Cancer Model of Care have been addressed to varying degrees. A review of this Model is currently being undertaken by the Tumour Collaboratives and key stakeholders. Once the review process has been completed it will be sent for endorsement to the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Integrated Primary Care & Cancer Services
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	November 2008

Introduction

The purpose of this Model is to establish a model of best practice care involving primary care teams for a person diagnosed with Cancer in WA. Three cancer patient focused recommendations are discussed in detail in the Integrated Primary Care and Cancer Services Model of Care. The recommendations encompass the role of health care providers in the care of the cancer patient from diagnosis through to palliative care; the impact of a cancer diagnosis on significant others including partners, carers and dependents; and the flow of timely and accurate information to and from primary care that may have a profound impact on the patients experience through the cancer journey.

The WA Cancer Model provides the basis for this primary health care model.

Achievements

As per the WA Cancer Model of Care 2008:

- Enhanced services have been provided to some regional areas with the increase in visiting medical specialist from the public and private sector. This has enhanced primary care support via collaboration and shared care of the patient.
- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models.
- Improved collaboration and networking has occurred with the multidisciplinary tumour collaboratives developing the tumour specific models.
- The multidisciplinary nature of engagement across all regions and sectors has led to a collective understanding of specialist led care close to home which is different to tertiary facility controlled care.
- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models.

In Progress

- The ongoing mapping of services and business cases for additional services including Aboriginal cancer care are in progress.

Challenges

As per the WA Cancer Model of Care:

- A state wide oncology information system would enable all patients to access the same treatment protocols – funding is unlikely to be available for this across the state.
- Attracting specialist oncologists to regional cancer units will be a challenge given the wide variety of specialists needed and the small number of individual tumours in some regions. A permanent mechanism to fund outreach by the tertiary specialists needs to be found to improve regional and rural outcomes.
- Cancer diagnostic and treatment services are extremely expensive and as the majority of this activity is done in an outpatient or ambulatory setting, private health insurance does not apply. The Commonwealth Safety Net program is available however, modern treatments often carry over calendar years and only cover 80 per cent of the gap in services in that year. Therefore many patients in the private sector and in the public sector in country WA are many thousands of dollars out of pocket. Some patients' access private services due to the often long wait for the initial outpatient consultation in the public sector, these waiting times can impact significantly on the prognosis. The same treatment regimes in the tertiary facilities have no out of pocket expenses therefore equity of access to free public health care is not available for many West Australians.

Future Priorities

- The WA Cancer Chemotherapy Credentialing Framework 2011 will support the aim to increase the number of patients able to receive chemotherapy closer to home. This Framework is designed for services currently providing chemotherapy as well as services planning to (re)commence chemotherapy provision.
- The Credentialing Framework will provide a common structure to promote a coordinated approach in assisting the development and implementation of systems for the credentialing and competency assessment of individuals involved in the delivery of cancer chemotherapy care.
- Explore increased shared care Models particularly for cancer survivorship.

Conclusion

Implementation of the Model is ongoing with a number of strategies of the Model implemented. Further progression towards achieving the recommendations requires additional resourcing.

This Model is currently being endorsed by the Principal Medical Advisor of the WA Cancer and Palliative Care Network prior to presentation to SHEF.

Level of Implementation
Level 2: Partial Implementation

Model of Care:	Neuro-Oncology
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	July 2007

Introduction

The Model of Care for Neuro-Oncology Cancer in WA provides the policy framework for the diagnosis, assessment and management of patients with primary malignant brain tumours. The Model draws together the evidence in relation to best practice and provides a framework for delivery of a transparent coordinated systematic patient centred approach that provides safe, quality, evidence based and multidisciplinary care resulting in optimum outcomes. Underpinning this journey is the integration of primary care, supportive care, psycho-oncology and palliative care.

The Model of Cancer Care 2008 provides the basis for this tumour site-specific Model. Fourteen key recommendations are outlined to shape clinical service delivery with particular importance on early referral of the symptomatic patient and multidisciplinary team management.

Achievements

Completion of two studies:

- Confidence to Care: A randomised controlled trial of structured home-based support and education for caregivers of people with high grade glioma. The aim was to evaluate a nurse-led tailored home-based education and support program for carers of people with High Grade Glioma in a randomised clinical trial.
- Audit to identify timelines in the Glioblastoma patient care pathways from surgery to start of treatment. This audit was performed to identify gaps in glioblastoma patient care pathways; compare findings against recognised and recommended standards; make recommendations to improve care pathways, and ensure cancer patients receive consistent, high quality and timely care.

In Progress

- Provision of written care plans to the patient, their family physician and the treatment team continues to be developed.
- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- Limited multidisciplinary workforce dedicated to this group of patients particularly in medical and radiation oncology.
- Many of these patients require long term oral chemotherapy, however without a dedicated nursing role, compliance and side effect management is challenging.

Future Priorities

- Enhanced workforce particularly an oral chemotherapy nurse at SCGH.

Conclusion

This Model emphasises supportive care to be a crucial role covering the time from initial diagnosis to the end of life. The needs are to be assessed throughout the treatment trajectory by the GP, neurosurgeon, medical oncologist, radiation oncologist, nurse practitioner, cancer nurse coordinator and neurologist, with referrals made appropriately.

The 14 key recommendations identified in the Neuro-Oncology Model of Care 2009 have been addressed to varying degrees through the eight steps based on the patient centred journey

This Model is currently being reviewed by the tumour collaboratives and key stakeholders. Once the review process has been completed it will be sent for endorsement to the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Psycho-Oncology
Network responsible:	WA Cancer & Palliative Care Network (WACPCN)
Endorsed/noted by SHEF:	November 2008

Introduction

Psycho-Oncology is concerned with the psychological, social, behavioural and ethical aspects of cancer. This sub-speciality addresses the two major psychological dimensions of cancer; the psychological responses of patients to cancer at all stages of the disease (and that of their families and caretakers); and the psychological, behavioural and social factors that may influence the disease process.

The Psycho-Oncology Model of Care draws heavily upon recommendations of the National Breast Cancer Centre & National Cancer Control Initiative and the Clinical Practice Guidelines for the Psychosocial Care of Adults with Cancer (2003) and seeks to apply the evidence highlighted by this document, to the provision of psychosocial care to cancer patients and their carers/families in WA. This Model aims to assist with the identification of strategies that can be incorporated into routine cancer care to identify and care for patients in need of psychosocial support.

The recommendations of this Model highlight the strategies that should be utilised in cancer care that have a significant impact on quality of life throughout all stages of the cancer journey, from screening and prevention, to survivorship or palliative care and grief bereavement; informing cancer service development across all levels.

Achievements

- Integration of specialist clinical psychology services for people affected by cancer within cancer centres and increasing accessibility to specialist care for inpatients and outpatients in the tertiary hospitals.
- Funding has been approved for additional psychosocial staff at SCGH.
- Increased cross-disciplinary collaboration across sites, settings and tumour groups with respect to education, research and peer support.
- The Psycho-oncology Collaborative formally endorsed the National Comprehensive Cancer Network Distress Thermometer and Problem List as the recommended distress screening tool.

In Progress

- Working party to develop evidence based best practice guidelines to inform decision making around adoption or routine psychosocial screening across services around the state.
- Research projects evaluate the effectiveness and fiscal efficiency of distress screening at KEMH.
- Finalising the details of a collaborative WA Cancer Communication Skills Initiative between WACPCN and the WA Cancer Council. The initiative aims to build capacity in cancer communication skills.

Challenges

- Inadequate workforce and expertise at peripheral sites to meet the complex psychosocial care needs of people affected by cancer attending those services. A decentralised model is currently planned for cancer care in WA.
- The emergent ABF Model does not accurately reimburse the provider for care of patients with complex biopsychosocial comorbidity.

Future Priorities

- To develop and deliver educational services that enhance the capacity of the oncology workforce to provide evidence based, best practice care that is preventative and holistic.
- Endorsement of Psychosocial Key Performance Indicators by the WACPCN and SHEF to enable these to be incorporated as quality improvement drivers for all services providing care to people with cancer and their carers families in WA.

Conclusion

The implementation of this Model is ongoing and progress has been made to articulate the pathways which enable the recommendations and principles outlined. This Model is currently under review by the Psycho-Oncology Lead Clinician. Once the review process has been completed it will be sent for endorsement to the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Skin Cancer: Cutaneous Malignant Melanoma
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	Pending Endorsement

Introduction

Melanoma is the second most common type of cancer amongst males and the third most common amongst females in 2012. The Model of Care for Skin Cancer: Cutaneous Malignant Melanoma provides the framework for delivery of a transparent coordinated and systematic patient centred approach providing safe, quality, evidence based, and multidisciplinary care resulting in optimum outcomes.

The WA Model of Care for Cancer 2008 provides the basis for this tumour site specific Model. The document describes how cutaneous malignant melanoma care should be delivered in WA and integrates primary care, supportive care, psycho-oncology and palliative care across the continuum of care.

The Model makes recommendations to facilitate the implementation of an equitable system for cutaneous malignant melanoma patients state-wide with particular emphasis on the referral pathway to the WA Melanoma Advisory Service for complex, advanced or difficult melanomas.

Achievements

- Enhanced support of patients as they transition between the private and public sector following the introduction of CNC Service.

In Progress

- The 'Understanding Melanoma Pathology' brochure is being developed.
- A working party, formed in April 2014, is investigating the use of a validated comprehensive needs assessment tool (the Sheffield Profile for Assessment and Referral for Care).

Challenges

As per the 2008 Model for Cancer Care

- A state wide oncology information system would enable all patients to access the same treatment protocols – funding is unlikely to be available for this across the state.
- Patients with advanced disease require access to clinical trials.

Future Priorities

- Increased support and resourcing to access clinical trials.

Conclusion

This Model was written in 2009 and then updated in 2013. It is currently pending endorsement by the Principal Medical Advisor of the WA Cancer and Palliative Care Network prior to being presented to SHEF.

Model of Care:	Testicular Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	Pending Endorsement

Introduction

This document outlines a model of care for the management of testicular cancer in WA. It is designed to be a statement defining best practice care and services within the health care system for a person with testicular cancer at each stage of the condition. Outcome is often dependent on early detection and reporting. This remains part of the treatment challenge in a male population, who are often reluctant to come forward with their health concerns especially when it involves this part of the body. The Model draws together the evidence in relation to best practice and in consultation with key stakeholders makes recommendations to ensure people with testicular cancer receive prompt appropriate care.

The WA Model of Cancer Care 2008 and the Model of Care for Urological Cancer 2009, provides the basis for this tumour site-specific Model.

Conclusion

The Model written in 2009 and updated in 2012 by Tumour Collaboratives, is a first Model of Care for Testicular Cancer. It is currently pending endorsement by the Principal Medical Advisor of the WA Cancer and Palliative Care Network before being presented to SHEF.

Model of Care:	Thoracic Cancer
Network responsible:	WA Cancer & Palliative Care Network (WACPCN)
Endorsed/noted by SHEF:	December 2008

Introduction

Thoracic oncology includes all tumours that arise within the thorax. The commonest such tumours are non-small cell lung cancer, small cell lung cancer and mesothelioma. The Model describes the current situation and best practice evidence based strategies where available across the continuum of care for the prevention and management of thoracic malignancies in WA.

The WA Model of Care for Cancer 2008 provides the basis for this tumour site specific Model. This document describes how Thoracic Cancer care should be delivered in WA and seeks to improve access to services in both metropolitan and rural WA. Underpinning this journey is the integration of primary care, supportive care, psycho-oncology and palliative care.

Eight key recommendations are outlined for implementation of the Model to shape clinical service delivery.

Achievements

- The Lung Cancer Interdisciplinary Clinic pilot project is now complete and evaluated. Although funding for this clinic has not yet been secured, a weekly 'drop in' dietetic clinic is now running.
- Establishment of an expert panel for Cancer Australia 'Supporting Aboriginal and Torres Strait Islander people with lung cancer and their communities' project
- Recruitment of patients for research project 'Lung Cancer examining the impact of surgery, chemotherapy and the role of exercise training in optimising recovery'.
- A new Thoracic Tumour Collaborative Lead commenced in 2014. This group has been successful in obtaining a grant from Cancer Australia called 'Lung Cancer Demonstration Project' which aims to target and assess principles of best practice in lung cancer.
- The impact on planning, workforce, policy development and service delivery has been significant as all health regions use this Model to inform their planning processes.
- The multidisciplinary nature of engagement across all regions and sectors has led to a collective understanding of specialist led care close to home which is different to tertiary facility controlled care.
- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models.

In Progress

- Improving MDTs care in tumour groups and regional areas is ongoing.
- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- The burden of disease in thoracic cancers is reflected in continually high incidence and mortality. Screening and meeting the needs of these patients is a continual challenge
- A state wide oncology information system would enable all patients to access the same treatment protocols – funding is unlikely to be available for this across the state.
- Attracting specialist oncologists to regional cancer units will be a challenge given the wide variety of specialists needed and the small number of individual tumours in some regions. A permanent mechanism to fund outreach by the tertiary specialists needs to be found to improve regional and rural outcomes.
- Incorporating private patients into the public MDT meetings continues to be an ongoing challenge.
- Due to inadequate resourcing it has proven difficult to collect accurate data to benchmark against national and international standards.

Future Priorities

- Improved care pathways.
- Exploration of lung cancer screening.

Conclusion

Implementation of this Model is ongoing and the WACPCN will work in partnerships with key service providers to monitor the implementation of the recommendations.

This Model is currently under review by the Collaborative Lead of Thoracics, Tumour Collaboratives and key stakeholders. Once the review process has been completed it will be sent for endorsement to the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Thyroid Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	December 2008

Introduction

Thyroid cancer is the most common endocrine cancer but only accounts for about one per cent of all malignancies. The Thyroid Model of Care draws together the evidence in relation to best practice and in consultation with tumour collaboratives and key stakeholders, makes recommendations to ensure people with thyroid cancer receive prompt appropriate care. Underpinning this journey is the integration of primary care, supportive care, psycho-oncology and palliative care.

The Model is aligned with the WA Model of Cancer Care 2008 and proposes more efficient and effective thyroid cancer management state-wide. It outlines nine recommendations to facilitate the implementation of an equitable system for thyroid cancer patients state-wide.

Conclusion

Some of the current strategies of the Model are already in place. Further progression towards achieving recommendations in the state-wide Model requires additional resourcing and funding.

This Model is currently pending endorsement with the Principal Medical Advisor of the WA Cancer and Palliative Care prior to presentation to SHEF.

Model of Care:	Upper Gastro-Intestinal Cancer
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	November 2009

Introduction

The Upper Gastro-Intestinal (UGI) Cancer Model of Care was developed by the Upper GI Collaborative Group with appropriate stakeholder and specialist consultation. The Model draws together the evidence in relation to best practice and makes recommendations to ensure people with gastrointestinal malignancies receive prompt appropriate care. It describes how Upper Gastro Intestinal Cancer care should be delivered in WA. Underpinning this journey is the integration of primary care, supportive care, psycho-oncology and palliative care.

The WA Model of Care for Cancer 2008 provides the basis for this tumour site specific Model. The Model outlines 17 recommendations across a continuum of care to facilitate implementation of an equitable system for upper gastro intestinal cancer patients state-wide.

Achievements

- Collaboration between public and private surgeons has improved patient care by agreeing to limit the number of locations performing high complexity, low volume operations.
- Continuing to provide education to a wide range of health professionals and patients.
- The completion of two clinical audits has informed service delivery.

In Progress

- Improving MDTs care in regional areas is ongoing.
- Providing written care plans to the patient, their family physician and the treatment team is also ongoing
- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.

Challenges

- The transition of UGI surgery from RPH to FSH has been delayed until February 2015.
- The re-mapping of UGI services across the state will be a time consuming but necessary task. The result of the mapping exercise will almost certainly mean a change of service delivery which will be difficult for both CNC's providing the current service and the recipients of that service.
- A state wide oncology information system would enable all patients to access the same treatment protocols – funding is unlikely to be available for this across the state.
- Data collection for outcomes evaluation is essential.

Future Priorities

- The Gastroenterology referral pathway has been put on hold until the transition of services to FSH.

Conclusion

Implementation of this Model is ongoing and the WACPCN will work in partnerships with key service providers to monitor the implementation of the recommendations.

This Model is currently under review by the Tumour Collaboratives and key stakeholders. Once the review process has been completed it will be sent for endorsement to the WA Cancer and Palliative Care Network Principal Medical Advisor prior to be presented to SHEF.

Level of Implementation

Level 2: Partial Implementation

Model of Care:	Urological Cancer (Prostate, Penile and Bladder)
Network responsible:	WA Cancer & Palliative Care Network
Endorsed/noted by SHEF:	Pending Endorsement

Introduction

The model of care for urological malignancies aims to outline the patient journey from diagnosis through treatment and supportive care where possible providing guidance on the type of care that should be delivered, the health care professionals who should be delivering that care and the type of facility where care should be provided. It makes particular reference to rapid referral of patients with symptoms of urological malignancy to allow for expeditious diagnosis and treatment.

The urological group of cancers encompasses a diverse range of illnesses with a wide variety of treatment needs. This document makes statements with regard to the general needs of this population. Statements pertaining to the management of specific urological diseases are made in each of the separate sections of this document pertaining to Prostate Cancer, Penile Cancer and Bladder Cancer.

The recommendations of this Model focus on early symptom recognition by the patient, a systematic approach to time-critical diagnosis and risk assessment. Other recommendations cover secondary prevention particularly systematic data collection and psychosocial support.

The WA Model of Cancer Care 2008 provides the basis for this tumour site-specific Model. It is also intended that for all patients aged 0-25 years, this Model be utilised in conjunction with the Model of Care for Adolescent & Young Adult cancer model of care.

Achievements

- Improved collaboration and networking has occurred with the multidisciplinary tumour collaboratives developing the tumour specific Models.
- The multidisciplinary nature of engagement across all regions and sectors has led to a collective understanding of specialist led care close to home which is different to tertiary facility controlled care.
- Education of health care professionals both in Perth and in Regional sites has enabled a wide variety of General Practitioners and oncology specific health professions to understand their role in implementing the Models.

In Progress

- Enhancing coordination of care through technology. The development of the electronic data base will provide the WA CNC service with the ability to seamlessly communicate across multiple health care environments to facilitate enhanced patient coordination; allowing collection of data in a systematic way; provide a legal record of nursing activity; and facilitate administration and reporting.
- The development of the Sheffield Profile for Assessment and Referral to Care (SPARC) assessment tool. This tool is a key component of a comprehensive assessment to ensure the appropriateness of onward referral. The SPARC working party at the SCGH site will investigate the efficacy, adaptability and usefulness of the SPARC tool.
- Provision of written care plans to the patient, their family physician and the treatment team continues to be developed.

Challenges

- To be determined following endorsement.

Future Priorities

- The move by the urological surgeons from the FHHS to the FSH in the near future would provide an ideal opportunity to install an up to date surgeon controlled robot. If this is not done, then the service being offered to public patients with suitable prostate cancers should be equitable to that being offered in the private sector.

Conclusion

This Model has completed the consultation/review process with the Tumour Collaboratives and is currently being endorsed by the Principal Medical Advisor of the WA Cancer and Palliative Care Network before presentation to SHEF.

Model of Care:	Palliative Care – including Rural Palliative Care Model and Paediatric and Adolescent Palliative Care Model
Network responsible:	Palliative Care Network
Endorsed/noted by SHEF:	October 2008 and September 2009

Introduction

The Palliative Care Model of Care, endorsed in 2008, is the overarching model of care for palliative and end-of-life care in WA. It describes best practice palliative care for people with life-limiting illnesses that can be provided at any stage in their disease or illness and within any setting (hospital, home, community). The Rural Palliative Care (endorsed 2008) and Paediatric and Adolescent Palliative Care (endorsed 2009) Models elaborate further on palliative care for these specific populations in WA. The overall focus of the Palliative Care Models is to guide the delivery of best practice patient-centred palliative care for any person in WA, regardless of diagnosis or preferred setting of care, and based on their needs. It also acknowledges the need for partnerships between specialist palliative care services and the wider health sector (hospitals, GPs, communities) to improve quality of care at the end-of-life.

The Palliative Care Model has nine recommendations that focus on implementation of the Model to ultimately deliver quality, equitable palliative care. The Palliative Care Network is responsible for the Model and is working to support its implementation across WA. This includes working with stakeholders in the hospital, community and home care settings on various projects that originated from the three Models. Since 2008, Election Commitment Funding has been the primary funding source for implementing all three Models.

Achievements

Key outcomes of the Palliative Care Model of Care:

- Developed the Evidence based clinical guidelines for adults in the terminal phase in 2010 through the Community Medications Project, currently in Second Edition as per recommendation 7.
- Established the north and south metropolitan area health palliative care teams to provide a link between hospital and community and focus on population groups that have previously been disadvantaged in accessing specialist palliative care (e.g. prisoners, aged care homes, mental health services) as per recommendation 4.
- Implemented and evaluated the Talking About End-of-Life program in 140 Residential Aged Care Facilities (RACFs) in WA through Department of Health and Ageing funding, stemming from recommendations 4, 5 and 6.
- Implemented and evaluated an End-of-Life Care Pathway in metropolitan and rural health care sites as per recommendation 6.
- Liaised with the Office of the Public Advocate to support the implementation of the legislation relating to Advance Health Directives and Enduring Power of Guardianship in WA (Consumer and health care professionals education and training, resource development).

Key outcomes of the Rural Palliative Care Model:

- The Network has developed and maintained a productive working relationship with WACHS to implement the Model's recommendations as per recommendation 2.
- Obtained funding for rural palliative care service development in each WACHS region as per recommendation 2, 3 and 4.
- Development of a Referral Guideline for the WACHS specialist palliative care services.
- Evaluation of the implementation of the Model was completed in 2012. Results were compared with a similar audit in 06/07 and included: 2741 palliative care patients seen in 2010; increased number of RACFs reporting palliative care provision for patients; increased number of staff receiving palliative care education and training; more services collecting palliative care data and more people dying at home.

Key outcomes of the Paediatric and Adolescent Palliative Care Model:

- The Network partnered with Child and Adolescent Health Service (CAHS) clinicians and consumers to both develop and implement the Model.
- Supported the development of the Paediatric Palliative Care Program at PMH, including workforce planning, capacity building, training of health care professionals and care workers, and development of resources.
- Supported and contributed to the evaluation of the Paediatric Palliative Care Program through data collection, analysis and reporting.
- Completed a review of respite services for paediatric palliative care patients and families and developed respite and community care packages to support them.
- Worked in partnership with CAHS to obtain funding for the Paediatric Palliative Care Program (election commitment funding).

In Progress

All Models:

- Election commitment funding for the Palliative Care Network to develop the Continuum for End-of-Life Framework (stemming from recommendations 3, 5, 7 and 8) which will focus on care management across the whole of health for patients with advancing disease and increasing decline, including advance care planning and care during the last days of life. This is expected to be completed by 2015.
- Recommendation 5 of the Palliative Care Model (referral pathway) is currently being developed through the Specialist Palliative Care Services Forum which aims to develop referral guidelines, pathways and templates for specialist palliative care services in WA. This is expected to be completed by 2015.
- Review of the End-of-life Care Pathway in metropolitan and rural health care sites to ensure continued quality care of the dying person (originally implemented as per recommendation 6. The review commenced following the release of the UK Independent Review of the Liverpool Care Pathway). This is expected to be completed by end of 2014.

- Database development for palliative care and ABF data collection is still in progress (Recommendation 9 of the Palliative Care Model) and awaiting further decision by IT SHEF. This is expected to be completed by 2015.
- A statewide palliative and end-of-life education and training plan which will guide health care professional learning is nearing completion (as per Recommendation 3 of the Rural Palliative Care Model).

Challenges

The majority of recommendations have been achieved or are in progress through the Palliative Care Network and key stakeholders. A critical challenge is securing recurrent funding for key services that are currently funded through the Palliative Care Networks Election Commitment funding: the Paediatric Palliative Care Program, the WACHS Regional Palliative Care Services; and the North Metropolitan Area Health Team (Palliative Care).

There are pressures on the finite resources of the WA healthcare system to provide patients with advancing and eventually fatal illness with increasingly complex and expensive treatments. WA's growing and ageing population and workforce shortages will continue. The Models acknowledge and reflect this.

Future Priorities

Three priority areas for the Network to lead on over the next eighteen months include:

- Oversee development and implementation of the Continuum for End-of-Life Framework
- Launch and implementation of revised Liverpool Care Pathway
- Revision of palliative care models of care

Conclusion

The Palliative Care Network through implementation of the Palliative Care Model of Care and associated Rural and Paediatric and Adolescent Models will continue to provide strategic influence with stakeholders and health services. While the activities related to the implementation of the Models have changed somewhat since endorsement, the principles and aims of the Models are still relevant.

The Models support the growing realisation that palliative and end-of-life care need to be integrated throughout health care, not just within specialist services. The development of the Continuum for End-of-Life Framework will address this and build on the Models. The Models will need to be revised to ensure they reflect the initiatives of the Framework.

Level of Implementation
Level 3: Substantial implementation

Cardiovascular Health Network

Abdominal Aortic Aneurysm

Acute Coronary Syndromes

Heart Failure

Model of Care:	Abdominal Aortic Aneurysm Model of Care
Network responsible:	Cardiovascular Health Network (CVHN)
Endorsed/noted by SHEF:	2008

Introduction

The Model aims to raise the profile of the condition and build on current service provision. The Model outlines that those identified with an Abnormal Aortic Aneurysm (AAA) be provided with integrated care involving support and monitoring of aneurysm size with a view to elective repair to prevent aneurysm rupture.

The Model is complemented by the guidelines for General Practitioner (GP) referral for first specialist assessment and diagnostic imaging pathways for the surveillance of an AAA.

The Model outlines three key recommendations to:

- improve awareness of the condition amongst high risk population groups
- make available best practice guidelines for screening, referral and imaging
- improve workforce understanding and education about AAA particularly GPs.

Achievements

- Outpatient and elective services referral guidelines for AAA based on clinical priority access criteria have been developed for vascular conditions including AAA and are available to GPs.
- Diagnostic imaging pathways have been developed and are regularly reviewed by a panel of experts, most recently in May 2013. These cover elective investigation of AAA, repair follow-up and spontaneous aortic dissection.

Conclusion

The recommendations of the Model have largely been implemented. A review is not considered necessary by Professor Paul Norman, Vascular Surgeon who is the vascular expert on the CVHN Executive Advisory Group.

Level of Implementation

Level 3: Substantial implementation

Model of Care:	Model of Care for Acute Coronary Syndromes in Western Australia
Network responsible:	Cardiovascular Health Network (CVHN)
Endorsed/noted by SHEF:	2009

Introduction

The Model of Care for Acute Coronary Syndromes (ACS) in WA provides the policy framework for the diagnosis, risk assessment and initial management of patients with ACS. The Model draws together the evidence in relation to best practice and makes recommendations to ensure people with ACS receive prompt and appropriate care.

The Model proposes more efficient and effective statewide ACS management. Its recommendations focus on early symptom recognition by the patient, a systematic approach to time-critical diagnosis and risk assessment particularly for the WA Country Health Service (WACHS) and support from cardiology (via advice lines) for decisions about retrieval and management. Other recommendations cover secondary prevention, particularly increased attendance at cardiac rehabilitation programs and systematic data collection.

The Cardiovascular Health Network (CVHN) works with partners across health, public and private, to implement the recommendations of the Model.

Achievements

- The CVHN collaborated with the Heart Foundation on educating primary care practitioners on the assessment of 'absolute cardiovascular risk' and continues to support their 'know the warning signs of your heart attack' campaign.
- Chest pain/suspected ACS pathways for use in WACHS have been signed off by the Chief Medical Officer for trial in WACHS.
 - The CVHN has obtained agreement from cardiology at the public tertiary sites that country practitioners should contact the consultant on call for advice.
 - Alignment with the pathways:
 - Only one thrombolytic agent, Tenecteplase, is now used statewide for thrombolysis for Acute Myocardial Infarction (AMI).
 - The WACHS patient form, MR1B, will be aligned with the ACS pathways.
 - Pathways in metropolitan sites are standardised and aligned with the ACS pathways to ensure consistency between those giving and receiving advice.
- The CVHN and the Department of Aboriginal Health are represented on Better Aboriginal Heart Health in WA (a National Health and Medical Research Council funded collaborative) to focus on translation of data into information to improve overall heart health for Aboriginal people.

- The CVHN launched the collaboratively developed cardiovascular and secondary prevention pathway principles in July 2014. The document emphasises cardiovascular rehabilitation and secondary prevention as being an ongoing intervention throughout life for those diagnosed with or at risk of cardiovascular disease. Referral to cardiac rehabilitation services is an eligibility criteria for the acute myocardial infarction (AMI) premium payment (see below).
- The Australian Commission on Safety and Quality in Health Care (ACSQHC) released clinical standards for ACS in November 2013. The CVHN co-ordinated significant input into those standards to ensure alignment of the standards with the ACS MOC.

In Progress

- Implementation of standardised data collection systems across the tertiary hospital sites will support more uniform data collection and assists with meeting the reporting requirements of the ACSQHC clinical standards for ACS.
- The ACS snapshot study gathered national data about ACS management. Networks on behalf of state governments nationally played a key role in resourcing and supporting the study. A follow-up late in 2014 will provide further data for benchmarking.
- The premium payment for AMI was introduced in July 2013 to incentivise best practice. The CVHN has worked to engage eligible sites in this initiative. Sign-up was initially slow but now most eligible sites are participating. Disbursing the funds to the department that submits the patients' data has helped to make the link between the achievement of best practice and the financial incentive.
- 12 lead electrocardiograms (ECGs) are being rolled out in all metropolitan St John Ambulances to allow pre-hospital ECGs to be performed to reduce the time to reperfusion for patients with an ST Elevation myocardial infarction. This was a recommendation of the ACS Model.
- The introduction of a standardised data collection and measurement system, cardiobase, will assist in the ongoing review of the impact of the ACS Model.
- Development of a communication strategy and implementation plan for the *Cardiovascular rehabilitation and secondary prevention pathway principles* project.

Challenges

- Complete implementation of the ACS Model relies on the establishment of clinically co-ordinated transfer functionality in WA and centralised bed management; and focus on time-relevant systems of care from a patient perspective (highlighted in data collection from the AMI Premium Payments).
- As stated previously in 2013, the recommendation regarding two tertiary cardiology sites is currently not implemented.
- Alternative models of telephone follow-up have been implemented by some cardiac rehabilitation services; however, there are potential gaps.
- Changes to cardiac rehabilitation services due to Activity Based Funding are being planned by Area Health Services which may limit or change service delivery. Increased access to, or capacity of cardiac rehabilitation is difficult in an ABF environment due to historical caps despite the clear acknowledgement that CR has been under-accessed

and needs to increase to improve health outcomes for people with ACS. In addition, access to community based exercise programs, chronic condition self-management and secondary prevention has been affected and it is difficult to fill these gaps.

Future Priorities

- The CVHN will participate in the WACHS-run Regional ACS Pathways Steering Committee to assist the WACHS with troubleshooting around the pathways roll-out and assist with cardiology engagement around the pathways
- Development and implementation of a communication and implementation strategy for the *Cardiovascular rehabilitation and secondary prevention pathway principles* project

Conclusion

- The ACS Model remains current with many of its recommendations being progressed. The CVHN will continue to assist with these activities where relevant.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Heart Failure
Network responsible:	Cardiovascular Health Network (CVHN)
Endorsed/noted by SHEF:	August 2008

Introduction

The Model of Care for Heart Failure describes the patient-centred journey, from primary risk reduction in the general population to assessment, early detection, management of stable and acute exacerbations and palliation for people with heart failure.

The Model outlines six key areas including: the establishment of statewide evidence-based guidelines, protocols and pathways; access to extended-hours of service, community-based services; information and advice for health practitioners and consumers delivered via a range of delivery channels; improved patient-level data collection. These are all underpinned by service integration and communication across organisations.

Prevention and management of cardiovascular co-morbidities and rheumatic heart disease are essential for reducing heart failure. Two unifying documents (developed by Health Networks) set out the principles and framework for a combined chronic conditions approach: 'Chronic Health Conditions Framework' and 'Chronic Conditions Self-management Strategic Framework'. This encourages practice outside condition-specific silos.

The CVHN is responsible for ensuring the Model is familiar to stakeholders across the spectrum of care and is used as the basis for related service and strategic planning.

Achievements

- The CVHN launched the collaboratively developed cardiovascular and secondary prevention pathway principles in July 2014. The document emphasises cardiovascular rehabilitation and secondary prevention as being an ongoing intervention throughout life for those diagnosed with or at risk of cardiovascular disease including heart failure.
- Community based chronic disease programs that focus on secondary prevention of cardiovascular health and lifestyle changes target high risk groups:
 - The South Metropolitan Health Service (SMHS) runs a weekly program Walyup Kworpading Koort (Healing Heart) to help Aboriginal people living in the Fremantle area to learn more about their heart health and make healthy lifestyle changes.
 - Heart Health program at Derbarl Yerrigan
 - Heartbeat is run at Bentley Armadale Medicare Local (funded by SMHS)
- Disease specific pages including one for heart failure are included in the information pack 'Advance care planning, a step-by-step guide for health professionals assisting patients with chronic conditions to plan for care towards the end of life'.
- Health Services run generic self-management programs that include heart failure days to educate staff and consumers.

- The WACHS Health Navigator Program run by the Southern Inland Health Initiative in partnership with Silver Chain coordinates care for those presenting with select chronic condition including heart failure. The principles of the Model strengthened the case made for this service.
- Funding has been received to develop heart failure video vignettes for GP education and upskilling.
- The CVHN assisted the WA Rheumatic Heart Disease (RHD) Register and Control Program (a Commonwealth funded initiative) to carry out a stakeholder consultation on modifications to the proposed regulations that affect notification of acute rheumatic fever regulations.
- The 2014 National Clinicians Network Forum was about transition of care from youth to adult. The CVHN facilitated the workshop on cardiovascular transition with a key focus on the prevention of RHD and notification of acute rheumatic fever.

In Progress

An education event in partnership with the Palliative Care Network will be held to discuss decisions around implantable cardioverter defibrillators for those with terminal cardiac conditions such as end-stage heart failure (who are not suitable for heart transplant).

An implementation and communications plan for the cardiac rehabilitation and secondary prevention pathway principles will be developed particularly for primary care. This should improve access to standardised support, education and care management plans for those with heart failure managed in primary care.

Challenges

A community based heart failure service, Smart Heart, aimed at reducing unplanned admissions for heart failure was piloted as a partnership between SMHS and Curtin University. The program has now ceased prematurely due to lack of resources.

The COACH telephone coaching service for people in rural and remote WA has been terminated and it is uncertain what will fill the gap that has been left.

There is a significant need for agreed patient pathways with appropriate resources for the primary care setting to help to support people with heart failure.

Future Priorities

Work to implement the cardiovascular rehabilitation and secondary prevention pathways and to ensure that generic programs recognise the need for specialist heart failure education and support.

Conclusion

The Model should be updated to include new WA Aboriginal heart failure data, developments within chronic disease self-management and aligned more specifically with the Chronic Health Conditions Framework.

Level of Implementation

Level 2: Partial implementation

Child and Youth Health Network

Fetal Alcohol Spectrum Disorder

Model of Care:	Fetal Alcohol Spectrum Disorder (FASD)
Network responsible:	Child and Youth Health Network (CYHN)
Endorsed/noted by SHEF:	March 2010

Introduction

The WA Health FASD Model of Care, developed by a working group of experts and interested stakeholders, describes the current situation and best-practice and evidence-based strategies where available across the continuum of care for the prevention and management of FASD. The Model includes 33 recommendations across a continuum of care, with a majority focusing on prevention which positioned WA Health as National leaders in this field.

This Model has now been superseded by the following two documents which grouped the Model's recommendations under core prevention concept themes for Primary, Secondary and Tertiary Prevention/intervention with measurable implementation strategies. The documents were developed through a coordinated consensus based approach involving a clear governance structure, comprehensive engagement and communications process.

1. The WA interagency, statewide Implementation Plan for the FASD Model (the Plan) aims to prevent FASD, reduce its incidence within the community and provide improved coordination of services where people with FASD are identified.
2. The FASD Framework (the Framework) aims to guide and support the WA FASD Implementation Plan for the Model through supporting government and community sector agencies when developing initiatives and programs/services to prevent or address FASD. Guiding Principles and criteria outlined in the Framework are:
 - o FASD is preventable – prioritising primary and secondary prevention
 - o Across sector responsibility and accountability
 - o Coordinated interventions
 - o Accessibility and equitability
 - o Public health principles
 - o Consumer and carer focussed
 - o Responsive to emerging evidence based on policy and practice
 - o Cultural diversity
 - o Cause no more harm
 - o Measurable/can be evaluated
 - o Sustainable use of resources.

While a complex health and human service issue, the focus of the Implementation Plan is prevention and management of alcohol as a public health issue. The majority of the recommendations relate to the Drug and Alcohol Office, public health; the maternity services sector and some child and adolescent health services.

Achievements

- Prior to noting at WA Health SHEF in late 2013, the following government and nongovernment organisations provided endorsement and or in principle support for:
 - A commitment to ongoing prevention of FASD
 - The Plan's implementation strategies as achievable
 - The Framework's guiding principles as appropriate.
 1. Drug and Alcohol Office
 2. Department of Education
 3. Department for Child Protection and Family Support
 4. Disability Services Commission
 5. Mental Health Commission
 6. Department of Local Government and Communities
 7. Department of Corrective Services
 8. Department of the Attorney General (Justice sector)
 9. Department of Racing Gaming and Liquor
 10. Department of Culture and the Arts
 11. Lotterywest
 12. Telethon Institute for Child Health Research
 13. McCusker Centre for Action on Alcohol and Youth
 14. WA Network of Alcohol and Other Drug Agencies
 15. Royal Australian College of General Practice
 16. Commissioner for Children and Young People
- Although initial non-responders, the Department of Aboriginal Affairs have also since engaged with the CYHN and support the Plan and Framework.
- This whole of government approach has provided an agreed approach for prevention and management of the complex social issue, including agreed criteria for investing in different strategies. Importantly it has improved collaboration, working in partnerships, with representation from over 40 health and human service government departments, nongovernment organisations and stakeholders.
- Strategies outlined in the Plan align with the following achievements in prevention of FASD:
 - Primary prevention: the Interagency Drug and Alcohol Strategy provides a platform to consistently promote the message "no alcohol during pregnancy is the safest option".
 - Secondary prevention: the audit-c alcohol screening tool is included in the WA hand held pregnancy record and will influence activity at the national level.
 - Tertiary prevention: service pathways to manage and support children and their carers.

In Progress

At a meeting in early 2014 between the A/Director General for Health and the Director General Department Premier and Cabinet, a commitment to primary prevention strategies targeting pregnant women were prioritised. However, no decision regarding ongoing ownership and monitoring for the Whole of Government Implementation has been finalised.

Government agencies and organisations operating within the child and maternal health sector continue to progress the FASD Implementation Plan/Framework strategies without the cross sector co-ordination needed to ensure the best use of resources.

Resource implications within the Plan and Framework are minimal and for WA Health are outlined below:

Primary prevention: continue whole of population, keep healthy alcohol messages.

- Opportunities to lever pregnancy specific messages, consistent with NHMRC guidelines. TheDrug & Alcohol Office play a significant role here.
- Secondary prevention: alcohol in pregnancy context.
- The main intervention is the adopted Audit-C alcohol screening tool which may carry minimal costs such as minor electronic system changes and paper trail/printing costs.
- Staff time resourcing costs are absorbed within the normal amount of assessment costs as per standard antenatal visits.
- Tertiary prevention: support and managing the child/person.
- Current child health assessments already identify children with developmental delay and refer them into appropriate support services.
- There are resource implications associated with complex specialist diagnostic tools however the plan does not emphasise a role for this.
- Treatment received for developmental delay/behavioural issues does not change and is always based on level of need identified.

Recent liaison with the Drug and Alcohol Office (DAO) has reported the following initiatives related to Implementation Strategies have been achieved and/or are in progress.

Primary prevention:

- Alcohol-Think Again – A range of public education campaigns focusing on alcohol and your health and alcohol and young people have been conducted state wide over the past 12 months.
- Strong Spirit, Strong Future program (SSSF) has received a further 12 months funding until 30 June 2015.
- SSSF Campaign - Two scheduled campaign bursts have been run in September 2013 and March 2014.
- Alcohol Think Again – The Alcohol Think Again website has been redeveloped.
- On behalf of the Executive Director, Public Health, the Drug and Alcohol Office assessed and investigated liquor licence applications statewide in relation to potential for alcohol-related harm or ill-health. The Executive Director, made submissions to the Licensing Authority on alcohol-related harm and ill-health matters and the minimisation of that harm.

- The Drug and Alcohol Office continued to work in partnership with the WA Local Government Association to provide support to Local Governments seeking assistance regarding evidence based approaches to alcohol management matters.
- Screening to prevent FASD 1 day workshop held 28/8/14.
- Strong Spirit Strong Future metro workshops planned for semester 2, 2014 and Semester 1, 2015 on Training@DAO calendar, metro event planned 7 Nov 2014.
- Regional training being planned up to end of June 2015.
- Key Aboriginal Advisory Group established for SSSF.
- SSSF- Consultation forum with Aboriginal stakeholders held October 2013.
- 9 Alcohol Management Plans (AMP) or Community Alcohol and Substance Plans (CASP) have FASD as a priority area of action.
- School Drug Education & Road Aware
- Australian Breastfeeding Association – Drink Safe mobile telephone Ap was developed and promoted.

Secondary Prevention:

- Women's and Newborns Drug & Alcohol Service (KEMH)
- DAO developing online learning package on FASD prevention in conjunction with Telethon Kids Institute.
- DAO delivering workforce development through SSSF and Training@DAO calendars.
- SSSF developed breastfeeding and alcohol fact sheet for health professionals.

Enablers – workforce

- DAO delivering workforce development through SSSF and Training@DAO calendars.

Enablers – Data collection of consumption patterns

- Routine data collection conducted by DAO's Monitoring Evaluation and Research Branch.

The Telethon Kids Institute is a key research body working in this area with FASD related research and developments being a significant component of their work. Recent studies include work related to the diagnosis, prevention, epidemiology, cost and impact on the juvenile justice system and Aboriginal communities. It should be noted not all of their research priorities align with the agreed whole of government approach outline in the Plan/Framework.

Broader liaison with stakeholders has not been pursued because the Plan/Framework have not yet been formally and publicly released.

Challenges

There is widespread anticipation for implementation of the Plan/Framework across all State and National contexts. The remaining challenge is to decide and communicate where the ownership and oversight of the ongoing monitoring process for implementation will sit.

Before concluding it's role, the across sector Project Control Group recommended the ownership of the monitoring process for whole of government implementation should now sit with the Drug and Alcohol Sector Senior Officer Group (DASSOG), chaired by DAO, now that the Community Services Leadership Group has ceased. It is also recommended ownership of the whole of government implementation still involves some Health leadership.

Within WA Health, the nomination of; who maintains overall responsibility for implementation of Health's nominated recommendations and, coordination of the whole of government monitoring process also still requires an Executive level decision.

Future Priorities

Executive level decisions regarding the ongoing monitoring and implementation process for the implementation plan are still required at both the whole of government partnership level and then within WA Health. Following this the Communications Plan for implementation and monitoring of the Plan/Framework can be finalised and released publicly for stakeholders to actively use.

The Communications Strategy has been drafted with the Communications Directorate and is required to manage some expectations of stakeholders around the Plan/Framework implementation strategies.

The Implementation Plan identifies agreed future directions for further research related to FASD when opportunities arise. This is important for both funders and researchers. There are possibly also some evaluation components requiring action related to measuring effectiveness of the Model and Implementation.

Conclusion

The Model has involved significant investment of time, expertise and energy from a number of people across multiple sectors. There is still widespread anticipation for the release of the Plan and Framework across State and National contexts and that Health will continue Leadership in this role.

However, official release of the Plan and Framework are being delayed due to the lack of decisions regarding ownership for ongoing monitoring and implementation.

Risks with this delay include loss of stakeholder engagement, traction, coordination and management which may have flow on implications for resources – particularly those advocating for resources not in line with agreed direction of the Plan/Framework and or lack of coordinated resource use across sectors.

Level of Implementation
Level 3: Substantial implementation

Diabetes and Endocrine Health Network

Diabetes

High Risk Foot

Model of Care:	Diabetes Model of Care
Network responsible:	Diabetes & Endocrine Health Network
Endorsed/noted by SHEF:	December 2010

Introduction

The key objective of the Diabetes Model of Care is to ensure that diabetes services are optimally configured to: prevent and delay the onset of diabetes; prevent and slow progression of diabetes complications; improve the quality of life of people who have diabetes; and reduce inequities in diabetes service provision, particularly for Aboriginal people and other disadvantaged groups. Eight key priorities are outlined for implementation of the Model. It is noted that while the Model 'is intended for application throughout WA, implementation will require flexible, networked solutions at the local level.' The Diabetes Model is strongly linked to the Model of Care for the High Risk Foot and the Type 2 Diabetes in Children and Adolescents Model of Care and Clinical Practice Guideline.

The Model outlines strategies for implementation of priorities, identifying expected impact, feasibility of implementation and timelines.

Achievements

- A range of new services has been developed in line with the Model in WA over the last three years. These include:
 - Diabetes Education for Self-Management for Ongoing and Newly Diagnosed Patients (DESMOND), a specialised education program adapted from the UK and run by Diabetes WA, as well as some primary health centres.
 - WA Government funding to Diabetes WA for Type 1 diabetes first aid training for teachers at all WA schools.
 - Chronic Disease Services funded by the WA Health's Better Health Improvement Program (BeHIP), totalling approximately \$14 million between 2011 and 2015:
 - The Metropolitan Healthy Lifestyle Program
 - The Chronic Conditions Self-Management Program
 - The Chronic Conditions Service Coordination Program
 - The Multidisciplinary Care and Service Coordination Program for people with diabetes
- The WA Health Promotion Strategic Framework 2012-2016 includes National Healthcare Agreement benchmarks to reduce prevalence of Type 2 diabetes.
- In 2012, the Health Strategy and Networks Branch on behalf of the Diabetes and Endocrine Health Network commissioned a major review by KPMG to inform future service planning. This resulted in the report 'Diabetes in WA: Prevalence and Services in 2012', which maps service needs and the extent of service coverage.

- The Diabetes and Endocrine Health Network (DEHN) hosted a WA Diabetes Action Summit in November 2013. This brought together over 70 people involved in diabetes prevention and care from across the State to start to develop WA diabetes standards and to determine how best to deliver these.
- The WA Framework for Action on Diabetes and Diabetes Service Standards 2014 has been produced following extensive consultation throughout the health system and throughout the State. This document, which includes a commitment to action, helps to translate key recommendations from the Model into practice. It was noted by the Operations Review Committee of the SHEF in September 2014 and the intention is to also gain endorsement from primary care agencies and the Aboriginal Health Council of WA. The document has been fed into the current consultation exercise on an emerging National Diabetes Strategy.
- A Diabetes Management Book has been produced to support and empower people with diabetes in self-managing their condition and communicating with health professionals. This has been published both on the WA Health and Diabetes WA websites. DEHN Executive Advisory Group (EAG) clinical and consumer representatives also contributed to the provision of suitable information on thyroid conditions on the Healthy WA website in 2014.
- The Self-Management and Review of Type 1 Intensive Education (SMaRT1E) program developed by the Rockingham General Hospital Endocrinology and Diabetes Service and Fremantle Hospital Diabetes Education Unit won the Director-General's Award at the 2013 WA Health Awards. This program actively engages people with type 1 diabetes to develop and apply knowledge, practical problem-solving and coping skills to achieve optimal self-management of their condition.
- In 2013, FHHS and Rockingham Hospital took part in the national inpatient insulin chart pilot project run by the Australian Commission on Safety and Quality in Healthcare. The WA pilot project team elicited extensive feedback from frontline staff and proposed a number of modifications to the national chart based on this. Overall, the chart was positively evaluated and a modified version is now in use in the WA pilot hospitals and is being shared with other hospitals in the State.

In Progress

- Planning for the new Telethon Juvenile Diabetes Family Centre is well underway and the Centre is due to open early in 2015. It will provide children and young people who have type 1 diabetes and their families with multidisciplinary support to complement care received at PMH, including support for transition to adult services.
- The DEHN EAG is currently attempting to establish a GP professional development project ('Advanced Diabetes Care in General Practice'). This is based on a successful Queensland model which has delivered improved clinical outcomes and financial benefits.

Challenges

- There are significant workforce shortages in Endocrinology and related disciplines. There are currently extremely limited adult Endocrinology-led services within rural and remote areas, a shortfall which impacts particularly on Aboriginal communities which have proportionately higher service needs than the rest of the population. Workforce capacity and capability issues were highlighted in the 'Diabetes in WA: Prevalence and Services in 2012' report.
- To date, WACHS has concentrated on evaluating its population service needs with local partners in September 2013, following difficulties in sustaining a contract with Rural Health West for the Integrated Diabetes and Endocrinology Services (IDES) project in Peel.
- The South Metropolitan and North Metropolitan Health Services are progressing with evaluation of service needs and future service planning in conjunction with their partners. This has proved challenging to date in light of service reconfiguration associated with the new FSH and the implementation of the ABF/M model.
- Following major challenges in co-ordinating activity, it was agreed by the Diabetes Statewide Working Group that its original intention to document an agreed system-wide ten year Diabetes Statewide Services Plan by 2014 was not realistic. However, this Group's work in producing the Framework and Standards (see Achievements section) is designed to support individual organisations to work in partnership to improve access to diabetes services and their quality and consistency across the State, in line with the key priorities of the Model.
- Addressing access inequities in service provision has proved highly challenging in the context of a diverse, complex and changing health system. It can be difficult to reallocate funding, even amongst the business units within WA Health, and even more so within the wider health system. New ways of working, cultural changes and additional resources will be necessary to deliver innovative new service approaches in line with the Framework and Standards e.g. increased provision of telehealth and professional development opportunities for GPs.
- Long term, collaborative planning and delivery of expanded diabetes prevention and treatment services, as recommended by the Diabetes MoC are waiting on decisions around changes in the primary and community care sectors (most recently with the Federal Government's initiative to transition from Medicare Locals to Primary Care Networks).
- The availability and quality of diabetes service data was identified as a challenging issue in the report 'Diabetes in Western Australia: Prevalence and Services in 2012.' For example, it was noted that 'there is use of local data information systems in some regions instead of statewide systems' and there is 'changing practices in relation to recording and coding of service activity over time, which differ by data set.' A further challenge to providing effective care is that there is no common database for all chronic conditions.

Future Priorities

- Work is required to develop and implement key performance indicators in relation to the WA Diabetes Standards, so that quality improvement can be consistently monitored and managed.
- A high priority is to support the development of specialist services from WA metropolitan tertiary hospitals to rural and remote areas (using telehealth as a key enabler).

- Strategic workforce planning and development is required to address current deficiencies. This includes professional development opportunities for GPs.
- A working group is being established to develop State-wide standards for medications and wound management for the High Risk Foot.

Conclusion

The Model was briefly reviewed by the DEHN EAG in 2013 and the key aspects were confirmed to be current. Implementation of the Model has been challenging to date, particularly in rural and remote areas where there is a significant shortfall of necessary services. It is hoped that the forthcoming publication and promotion of the Framework and Standards will give new impetus to those who are responsible for planning and providing diabetes services to work in partnership to improve the accessibility and quality of those services across WA. Given the passage of time since the original Model was produced and the significant developments in the last year and in the months to come, the DEHN will re-consider reviewing the Model to bring it up to date.

Level of Implementation

Level 2: Partial implementation

Model of Care:	Model of Care for the High Risk Foot
Network responsible:	Cardiovascular and Diabetes & Endocrine Health Network
Endorsed/noted by SHEF:	December 2010

Introduction

The main objectives of the High Risk Foot Model of Care (HRF MoC) are to prevent and/or delay complications of the high risk foot at all stages, especially amputations, and to deliver equitable and cost-effective high risk foot services particularly to rural and remote Aboriginal communities. The Model outlines eight broad recommendations which are intended to improve patients' outcomes, provide more coordinated and efficient care and to reduce health care costs in the long term.

The Model is informed by and builds on the recommendations of the Diabetes Model of Care (2008) and the Amputee Services and Rehabilitation Model of Care (2008). It was developed by a High Risk Foot Working Group under the auspices of the Cardiovascular and Diabetes & Endocrine Health Networks. In 2012, when a Podiatrist was appointed as the Co-Clinical Lead of the Diabetes & Endocrine Health Network, it was agreed that this Network would monitor the progress of implementation. The Model includes an implementation plan which identifies a variety of partner organisations with responsibilities for implementation.

Achievements

- Multi-disciplinary high risk foot clinics (MDHRFCs) are established at RPH, FHHS and SCGH.
- Mooditj Djena, a metropolitan wide HRF and diabetes education service for Aboriginal people, was started in 2011. The service focuses on the prevention and management of foot complications resulting from poorly controlled chronic diseases e.g. diabetes, peripheral arterial disease and peripheral neuropathy. Part of the National Council of Australian Governments (COAG) 'Closing the Gap' initiative, the program was developed collaboratively between the NMHS, SMHS, community members and the Derbarl Yerrigan Health Service. Under the WA Footprints to Better Health Strategy, additional State funding has been received until June 2015 to continue the provision of the clinical service.
- A set of evidence-based WA standards and clinical guidelines for management of the HRF has been produced in 2014 with the aim of preventing complications through early detection and actively managing any existing problems. The standards and guidelines have been widely consulted on and endorsed by the Diabetes and Endocrine Health Network Executive Advisory Group. They will be published alongside the WA Framework for Action on Diabetes and Diabetes Service Standards 2014.

- Anecdotally, it appears that there has been improved awareness of the HRF and relevant prevention and treatment services for both clinicians and consumers, improving the opportunities for care co-ordination and multi-disciplinary management. The third edition of the Podiatry Directory was made available on the WA Health website in 2013. Anecdotal evidence suggests that it is well used.
- At the time the Model was developed, consumer foot care information, particularly for Aboriginal people, was a significant gap. This has been partially addressed through the development of specialist information resources, including those produced by Diabetes WA and an awareness-raising DVD, 'Bran Nue Leg', developed by The Combined Universities Centre for Rural Health (CUCRH) with Commonwealth funding.
- CUCRH undertook a HRF project from March 2011 to July 2013. This involved the delivery of 16 high risk foot multidisciplinary workshops, with 143 health practitioners trained in high risk foot assessment, 240 health practitioners were provided with equipment necessary to complete a high risk foot assessment, 11 conference presentations made, and 1218 health practitioners in total were engaged. The project was funded by the Commonwealth Government and has been positively evaluated in terms of increasing knowledge, whilst noting that the correct assessment tools need to be used on an on-going basis to identify the level of risk and refer as appropriate.
- A number of standardised record forms including a neuro vascular assessment form and foot ulcer assessment record have been developed and are in use throughout WA Health. However, these forms have not been introduced to the Aboriginal Medical Services and other non-WA Health providers servicing the relatively higher risk Aboriginal and rural and remote populations.
- Through the Diabetes and Endocrine Network and other mechanisms such as the Diabetes WA Aboriginal Health Forum, there has been improved collaboration and partnership working between agencies (including non-government organisations (NGOs) to improve foot care services, particularly for the Aboriginal population.
- A study of trends in amputations in people with diabetes in WA has been undertaken in the School of Population Health at UWA and has been submitted for publication. This showed that the incidence of recurrent minor (toe) amputations was increasing but that the incidence of major amputations was decreasing, suggesting better secondary prevention. However, primary prevention of initial minor amputations remains a challenge. A health economic analysis is still required and is under consideration.
- The 'Five Foot Steps for Managing Chronic Foot Ulceration' program, a self-directed online training package and posters/tool to guide assessment and referral for multidisciplinary care, has been developed by the NMHS in partnership with Silver Chain. This package was positively evaluated following a pilot in August 2013 and is now available on the internet. It has been promoted through workshops at the WA Public Sector Podiatrists Forum, the Multidisciplinary Australian Wound Management Association (AWMA) WA, and also at/through the AWMA national conference, the National Advanced Practising Podiatrists Group, SCGH staff and Podiatry students. There is further planned promotion to WA private podiatrists, GP practice nurses and Medicare Locals. There is also discussion regarding promotion/implementation at FSH.

In Progress

- Planning for a MDHRFC and in-patient service (four beds) at FSH is underway, with the State-wide Rehabilitation Centre due to open in October 2014 and a professional lead and other Podiatry staff appointed.

Challenges

- There is a significant shortfall in publically funded podiatry positions and related disciplines (e.g. Endocrinology) in WA. The shortfall is most evident in rural and remote areas and has the greatest impact on Aboriginal communities in these locations as they have proportionately higher service needs. Workforce capacity and capability issues (including the need for on-going professional development) were highlighted in the 'Diabetes in WA: Prevalence and Services in 2012' report and in a Ministerial Briefing Note on diabetes-related amputations (September 2013).
- Research and other non-core activity such as quality improvement, education, representation of the podiatry profession in strategic and operational matters remains constrained due to the shortfall in podiatry FTE.
- The MDHRFC at RPH uses telehealth to deliver services to some rural and remote areas. However, there is currently limited capacity to extend this much-needed service to other areas and with upcoming staff reductions, the current level of service is likely not to be sustainable.
- There is no funding for a podiatry intern or P1 positions at FSH. The SCGH intern position ceased in August 2014 (identified in the ABF Reconfiguration Project as surplus to requirements). The RPH Graduate Podiatrist program will not continue beyond February 2015. This is due to reconfiguration related to ABF and the opening of FSH. These developments conflict directly with a key recommendation of the HRF Model to expand the podiatry intern program.
- Some of the workforce and related podiatry issues require a national approach and it has been recommended to the WA Minister for Health that HRF care is raised at the COAG health sub-committee to seek solutions at the national level.
- There is a significant education/training gap in relation to screening for and assessment of the high risk foot in rural and remote areas. No funding is available at the National or State level to extend/develop the HRF project to deliver additional (and sustainable) training to health workers in rural and remote communities. Podiatrists in some remote/rural areas are offering ad-hoc training in diabetic foot assessment to other health professionals in addition to their full clinical workload.
- Addressing access inequalities in services for the HRF has proved highly challenging in the context of a diverse, complex and changing health system. It can be difficult to reallocate funding, even amongst the business units within WA Health, and even more so within the wider health system. There are multiple funding sources and service providers and the significant and ongoing organisational and funding changes in the primary care and community sectors (most recently the transition from Medicare Locals to Primary Health Networks) restrict support long term, collaborative planning, service continuity and the expansion of preventative screening and assessment services for the high risk foot which the Model recommends.
- Referral pathways are problematic, especially in cases requiring urgent review. They are not clear to GPs and others and this can cause delays in review. GPs and Private Specialists cannot refer directly to podiatry services and may not be aware of referral

options including MDHRFCs. Nurse practitioners in metropolitan areas are also not allowed to refer to outpatient clinics via the Central Referral Service.

- Many public Podiatry services will not accept or discharge patients to GPs, requesting that the GP arrange Podiatry under Medicare-rebated items. However, with a limitation of five allied health visits per calendar year, this is often not sufficient to cover patients' Podiatry and other allied health needs, especially for those with co-morbidities.
- The Patient Assisted Transport Scheme (PATS) will not fund the attendance of patients at Allied Health appointments in the metro area, only medical specialists. Also, the fact PATS will not fund travel to podiatry whilst wounds are healing is major disadvantage for rural people; they need to be offered equal care which is care at a tertiary hospital until the ulcer is healed.

Future Priorities

- Opportunities will be sort to continue the podiatry intern program and address workforce shortages particularly where there is potential to use telehealth and to train more practitioners to provide services in rural and remote areas.
- A working group (reporting to the Diabetes and Endocrine Health Network EAG) is being established to develop State-wide standards for medications and wound management for the High Risk Foot.

Conclusion

The Model was briefly reviewed by the Diabetes & Endocrine Health Network Executive Advisory Committee in June 2013 and the key aspects were confirmed to still be broadly relevant. Whilst much has been achieved with limited resources in recent years, significant challenges remain and there is concern of the impact of increased service demands and reduced resources on future progress of the Model.

Level of Implementation

Level 2: Partial implementation

Digestive Health Network

Home Enteral Nutrition

Model of Care:	Home Enteral Nutrition Model of Care
Network responsible:	Digestive Health Network
Endorsed/noted by SHEF:	December 2010

Introduction

The Home Enteral Nutrition (HEN) Model of Care is an articulation of best practice for individuals requiring Home Enteral Nutrition resulting from their medical diagnosis or condition. The Model supports evidenced-based practice to ensure appropriate and effective delivery of HEN for all Western Australians. This Model excludes Home Parenteral Nutrition (HPN) as this is a separate issue to be addressed in the HPN Model of Care.

The model seeks to improve access to services for people in both metropolitan and rural WA across the service delivery continuum for patients who cannot meet their nutritional requirements by normal dietary intake, have a functioning gastrointestinal tract and who are able to receive therapy outside of an acute setting. It provides a framework for delivery of a transparent coordinated and systematic patient-centred approach to improve health outcomes and quality of life for HEN patients.

The Model outlines six key recommendations to facilitate the implementation of an equitable system for HEN patients state-wide with a focus on best practice in HEN management.

Achievements

- The recent commencement of the Rehabilitation in the Home service in Joondalup has allowed those patients who meet the referral criteria to have their HEN provision reviewed in the home environment. This service is capped to eight weeks post-discharge but is a service WA Health was not previously providing at all sites.
- The Metropolitan Dietetics Managers group has continued to collaborate to address ongoing equity issues regarding HEN and to work within the frameworks to advocate for improvements in HEN provision in WA.
- Due to the visible differences in service delivery across the state clinicians and consumers are more engaged than ever to develop and implement an equitable State HEN system.
- Following the directive to cease charging for HEN at the major tertiary centres, Health Strategy and Networks and the Intergovernmental Relations Unit have progressed to a clearer understanding of the complexities of progressing the implementation of the Model.
- The Chief Health Professions Officer (CHPO) has become engaged in progressing the Model.

In Progress

- Progress would require a whole of Health approach and directive along with resourcing to achieve these recommendations. Inequities still exist and the gap has widened since tertiary sites ceased charging patients.
- Recommendation 1 – Establish a State HEN service focused on a central database, standardised protocols and documentation, access to hospital tender pricing, a virtual centralisation of services. No progress to date.
- Recommendation 2 – Ensure equitable access to adequately resourced clinical care in the appropriate setting. No progress to date.
- Recommendation 3 – Ensure equitable access to HEN specialised nutritional products and equipment (and associated consumables). The current state tender for nutritional products, the enteral feeding systems and associated consumables have referred to the need to provide products to all areas of the state but evidence suggests that regional and remote areas continue to be disadvantaged in terms of access to products and equipment
- Recommendation 4 – Standardise charges for HEN across the state and establish co-payments for all patients including partial state funding of HEN products. Due to the directive to cease co-payments in the tertiary hospitals this recommendation has regressed, and has further highlighted the inequity between sites and regions. This issue should be rectified by developing a state-wide HEN subsidy scheme.
- Recommendation 5 – Establish a WA State register/ database for HEN patients. No progress to date. Some sites continue to maintain their own HEN records but there is no standardisation and no formal means of sharing information and data.
- Recommendation 6 – Develop and adopt state-wide standardised clinical practice guidelines and procedures. Nil progress specific to HEN.
- The Independent Hospital Pricing Authority (IHPA) is conducting a nationwide HEN and HTPN costing study, and is expected to conclude soon.
- A Briefing Note for the Acting Director General has been developed in consultation with IGR, HSN and the CHPO to advise of progress, and seek guidance related to the issues.

Challenges

There are a number of challenges impacting on the implementation of the HEN Model recommendations:

- Funding – While block funding has been received for Dietetics, there has been no budget identified specifically for HEN. Commonwealth funding for HEN is expected to transition to ABF in the future. It is not clear whether HEN will continue to be funded on the basis of ABF from 2017/18, when the Commonwealth is expected to change its funding model for public hospital services.
- IT differentiation across sites and lack of resources has inhibited development of state databases, and impacts on data collection for ABF payments.
- Following legal advice patient co-payment for HEN products was stopped; consequently, there has been a reduction in revenue to tertiary hospitals. There is no system capacity to support co-payment of products from patient to hospitals.
- Lack of clarity to date regarding a state wide equitable HEN subsidy scheme. Any charges to patients by WA Health for HEN products would first need to be approved by Government and gazetted.

Future Priorities

- Future priorities will be dependent on the outcome of the submission of the Briefing Note to the A/Director General and subsequent advice.

Conclusion

There has been no change in the implementation of the HEN Model, but there has been some progress in bringing the related issues to the attention of executive forums.

Level of Implementation

Level 1: Little/no progress

Falls Prevention Health Network

Falls Prevention Model of Care for the Older Person

Model of Care:	Falls Prevention Model of Care for the Older Person
Network responsible:	Falls Prevention Health Network
Endorsed/noted by SHEF:	April 2008

Introduction

The Falls Prevention Model of Care was revised by the Falls Prevention Health Network (FPHN) Executive Advisory Group as part of the overarching Model of Care for the Older Person in WA. The vision for the Model is for people to maintain their independence and a good quality of life for as long as possible by reducing their risk of falls and fall related injuries.

The Model recognises that falls prevention is an issue requiring attention across the lifespan. The words “for the older person” have been removed from the title of the document in order to reflect this shift in emphasis to a whole-of-life approach for falls prevention, and recognise the importance of healthy lifestyle decisions in early and adult life and into older age. It includes 16 new recommendations which build on the progress and success of the 2008 Model and focuses on four main areas:

1. Create a robust and healthy population
2. Apply falls prevention interventions
3. Optimise care pathways and communications
4. Support the translation of research into practice.

The FPHN takes on a facilitation role to ensure partners across all settings implement the recommendations of the Model.

Achievements

New and expanded services

- Falls Specialists Coordinators have continued to operate in most metropolitan hospital sites, within Day Therapy Units, to improve clinical skills of individual clinicians in falls prevention and support training and education across the health continuum. Linkages with WACHS regional sites have been established to facilitate the exchange of clinical knowledge and skills.
- Day Therapy Units have been expanded in metropolitan and some regional hospital sites improving the capacity of Falls Clinics to deliver clinical care in an equitable manner across Perth.
- The number and quality of the Council on the Ageing WA’s Living Longer Living Stronger™ programs has significantly increased and a tiered system has been established to direct people to an appropriate program based on their health status.
- The group based falls prevention exercise classes provided by Community Physiotherapy Services are servicing increasing numbers of people, with 651 group occasions of service in 2007/08 to 1517 in 2011/12.

Inpatient falls prevention

- The Safety and Quality Investment for Reform (SQulRe) Clinical Practice Improvement program has been sustained and recurrently funded yearly since its implementation in 2006, recognising falls prevention as an ongoing priority for WA Health.
- The WA Health Falls Prevention Community of Practice was established in 2009 to build on the SQulRE program and focus on inpatient falls prevention in WA through collaborative learning, sharing and support for quality improvement staff. Key achievements include the development of the Post-Fall Management Guidelines in WA Healthcare Settings.
 - More recently, the Community of Practice have revised the former Falls Risk Management Tool, now known as the Falls Risk Assessment and Management Plan (FRAMP). Artwork of the tool has been finalised and is available for use by hospitals to help achieve standardisation across the state.
 - The FRAMP has also created synergies with acute dementia care as the screening, scoring and diagnosis aspects consistent with national guidelines for dementia and delirium have been incorporated into the tool. With the FRAMP implementation, WA hospitals are well positioned to improve care of those with dementia with this document providing a contemporary, locally adaptable base of care upon which other projects and measures can build on.
 - Use of the former Falls Risk Management Tool was audited as a part of the first WA Safety and Quality Point Prevention Survey in May 2014.
- An educational video on falls prevention and post fall management for doctors has been developed. It is available for use by hospitals when training staff.

Consolidating public health falls prevention strategies

- The Injury Control Council of WA were the successful tender applicants for WA Health injury prevention contract and will continue to deliver the Stay On Your Feet WA[®] program over the contract period. There will be a focus on themed campaigns and also the development of training for strength and balance focused exercise programs.

Improved linkages with the health system

- Improved linkages with the subacute sector through partnerships with Training Centre in Subacute Care and the Subacute Care Community of Practice.
- Improved linkages with a reference group developed to improve care to people with cognitive impairment in hospitals.
- Improved linkages with ambulance services with the commencement of educational activity.
- WACHS have developed a Falls Interdisciplinary Working group with representation from every WACHS site as well as representation from multiple disciplines.

- WA continues to engage with other states and territories to share information and experiences regarding falls prevention through the:
 - Australian Commission on Safety and Quality in Health Care National Falls and Falls Injury Prevention Reference Group
 - Australian and New Zealand Falls Prevention Society on Translation of Research Into Practice and Policy Sub-committee.

Research

- A study which aimed to evaluate the effectiveness of providing individualised falls prevention patient education with staff training to support the program in addition to usual care, on rates of falls in hospital rehabilitation units was recently completed. The results were positive and demonstrated a reduction in falls and injurious falls in older patients undergoing rehabilitation. The study was funded through the State Health Research Advisory Council (SHRAC).
- The Falls Prevention Health Network is a partner in the National Health and Medical Research Council (NHMRC) funded RESPOND project with Monash University and several others. The project is exploring a new method of care delivery using self-management and adult education principles. The project will help advise further developments and aid engagement of those presenting to the emergency department with a fall.

In Progress

- Falls prevention information for health professionals is being compiled and will be included on WA Health's new corporate website.
- The Falls Prevention Online Training Package for nursing and allied staff is being revised by a Community of Practice Working Group. The education video produced for doctors will complement this package.
- An operational directive mandating the use of the FRAMP is being developed.
- A statewide audit tool for the FRAMP is being developed.

Challenges

- The effects of service reconfiguration and Activity Based Funding on outpatient services such as falls specialists and Community Physiotherapy. This has resulted in the loss of a statewide falls specialist coordinator position.
- Recognition of the importance of falls amongst ambulance services and clarification of their role in post fall management and referral is needed.

Future Priorities

1. Education:
 - a. Introduce inpatient education for rehabilitation wards across WA, based on the intervention trialled in the recent SHRAC project (see Achievements)
 - b. Drive and collaborate with non-government organisations and other partners to develop and utilise multimedia education across health settings. Key messages will be taken from the Model.

2. Raise awareness across the system around harm and over-utilisation of benzodiazepines.
3. Optimise the use of Vitamin D supplementation

Conclusion

Given that the Falls Prevention Model of Care was only recently revised, there are no further plans for revision at this stage. Immediate efforts in the future will focus on the implementation of the Model recommendations; many of which are underway due to the momentum from the 2008 Falls Prevention Model of Care.

Level of Implementation
Level 3: Substantial implementation

Familial Hypercholesterolaemia Australasia Network Consensus Group

Familial Hypercholesterolaemia: A Model of Care for Australasia

Model of Care:	Familial Hypercholesterolaemia: A Model of Care for Australasia
Network responsible:	Project is funded under BeHIP
Endorsed/noted by SHEF:	Elsevier: Atherosclerosis Supplements 12, 2011

Introduction

Familial Hypercholesterolaemia (FH) is the most common and serious form of inherited hyperlipidaemia. If untreated, this could lead to chronic illness and premature death from heart disease in many families. FH accelerates by 1 to 4 decades, the onset of all forms of atherosclerotic cardiovascular disease, particularly coronary artery disease and myocardial infarction.

FH is a dominantly inherited disorder present from birth that causes marked elevation in plasma cholesterol and premature coronary heart disease. There are at least 45,000 people with FH in Australia and New Zealand, but the vast majority remains undetected and those diagnosed with the condition are inadequately treated.

To bridge this major gap in coronary prevention the FH Australasia Network (Australian Atherosclerosis Society) has developed a consensus Model for FH. The Model is based on clinical experience, expert opinion, published evidence and consultations with a wide spectrum of stakeholders, and has been developed for use primarily by specialist centres intending starting a clinical service for FH. This Model aims to provide a standardised, high-quality and cost-effective system of care that is likely to have the highest impact on patient outcomes.

The Model for FH is presented as a series of nine recommendations and algorithms focusing on the standards required for the detection, diagnosis, assessment and management of FH in adults and children. The process involved in cascade screening and risk notification, the backbone for detecting new cases of FH, is detailed. Guidance on treatment is based on risk stratifying patients, management of non-cholesterol risk factors, safe and effective use of statins, and a rational approach to follow-up of patients. Clinical and laboratory recommendations are given for genetic testing. An integrative system for providing best clinical care is described.

This Model for FH is not prescriptive and needs to be complemented by good clinical judgment and adjusted for local needs and resources. After initial implementation, the Model will require critical evaluation, development and appropriate modification.

Achievements

The FH program supported by WA Health established an effective Model for the early detection of people with FH to allow for implementation of preventative treatment to reduce risk of cardiovascular events in these patients through:

- Provision of an enhanced service of the Lipid Disorders Clinic (LDC) at Royal Perth Hospital (RPH)
 - A nurse-led cascade screening program to identify new family members with FH (via telephone screening, outpatient services and telehealth services)

- A nurse-led screening program in the Coronary Care Unit at RPH to identify initial cases of FH
- Support to PMH for the care and management of paediatric patients with FH
- Development of new partnerships with national and international collaborators as well as with the Medicare Locals, general practices, the private sector and the pharmaceutical industry. These include:
 - International FH Foundation
 - National Heart Foundation
 - Australasian Atherosclerosis Society
 - WA Country Health Services
- Establishment of a National Registry for FH with the support of the Office of Population Health Genomics and the FH Australasia Network
- Establishment of a Model of Care for Australasia
- Clinical Nurse Specialist (CNS) position secured at RPH
- Integrated Guidance on the Care of FH as part of the International FH Foundation
- The Primary Care Model of Care for FH has been published and established; and is currently being implemented with the involvement of Nurse Practitioners out in the community
- Provision of GP, nurse, clinician and community education in a range of settings with educational resources for health professionals and patients
- Establishment of a Family Support Group for FH patients and their families
- An economical evaluation of the cascade screening program, in collaboration with Royal Melbourne Hospital/University of Melbourne Epicentre, demonstrated that the incremental cost-effectiveness ratio over a 10-year period was predicted to be AUD\$4,155 per years of life saved and AUD\$3,565 per quality adjusted life years gained
- Online Dutch Lipid Clinical Network Score calculator completed

In Progress

- National Registry for FH
- Website for patients and health professionals progressing well
- Employment of clinical data extraction tool in General Practices to increase detection of FH in the community

Challenges

Ongoing challenges to be addressed under the project include:

- Insufficient resources to handle new referrals from primary care.
- Increase in myocardial infarction, medication non-adherence, health inequality and healthcare costs
- Inadequate numbers of FH patients identified and continual shortfalls in detection rates.
- Inadequate care for a group of patients at high-risk of coronary artery disease.

Future Priorities

BeHIP funding for FH Model ceases 30 June 2015. The key priority areas within scope of the funding period are:

- Implementation of care pathways in Primary care
- Completion of the website and data extraction project

Conclusion

The overall objective of the FH Model is to prevent early heart disease and promote well-being in high risk families with FH. The clinical service has been designed to decrease health expenditure and improve work productivity by preventing early heart disease in the community.

The FH pilot cascade screening program is an effective model for identifying and treating patients with FH. Statin treatment of FH patients saves up to 2.39 years of life per person and up to 111 myocardial infarctions in 100 cases of FH. These benefits are even greater in younger ages and in males. Special effort should be made to identify these patients.

Detection of family members with FH is relatively inexpensive; especially when post-pilot costs are used. Costs are likely to decrease further as DNA testing technology becomes more affordable. Up to \$413,391 in costs have been averted by the FH pilot program as a result of preventing Myocardial Infarction; this figure could be much higher if other cardiovascular outcomes were considered. Approximately 3500 cases of FH remain untreated in WA. Detection and treatment of these cases could avert as much as \$28 million in hospital costs for the WA government. Cascade screening for FH, using genetic testing, supplemented with a lipid profile and treatment with statins, is a highly cost-effective means of preventing coronary heart disease in families at-risk of FH.

The achievement of the objectives under BeHIP funding will be monitored by Health Strategy and Networks.

FHWA are transitioning from the BeHIP funded cascade screening program to an embedded state service at RPH. FHWA will continue their work beyond the scope of BeHIP funding including the national registry for FH and a health economic evaluation for children. It is anticipated that the FH Model and the screening program, with patients transitioning to Primary Care via the care pathways will be a sustainable service.

Level of Implementation

Level 3: Substantial Implementation

Infections and Immunology Health Network

Hepatitis C

Anaphylaxis

Human Immunodeficiency Virus

Sexually Transmitted Infections

Model of Care:	Hepatitis C Virus
Network responsible:	Infections and Immunology Health Network
Endorsed/noted by SHEF:	2009

Introduction

The Hepatitis C Virus (HCV) Model of Care describes best practice care and services within the WA healthcare system for a person or population group prior to infection and as they progress through the stages of testing, treatment and care for HCV infection. The outcomes of an effective Model are to:

- improve the quality of life for people with HCV
- provide optimum care for patients with HCV-related liver disease
- increase awareness and health promotion strategies to reduce the risk of HCV infection, especially in high risk population groups
- increase the levels of HCV screening and testing in the general community but particularly within high-risk population groups.
- increase the levels of (or proportion of) people with HCV being regularly monitored
- improve access to appropriate health care services
- increase the uptake in treatment of HCV in order to increase the number of people with eradicated disease
- reduce the rates of HCV infection in WA and thereby impact the epidemic curve
- improve access to ancillary support services for people living with HCV, including mental health support services
- increase the number of skilled practitioners in the workforce.

The HCV Model of Care is supported by the HCV Model of Care Implementation Plan 2010 – 2014 that incorporates a Memorandum of Understanding between all major stakeholders.

Achievements

- Mid-term review of the four year Implementation Plan (2010 – 2014) of the Model highlighted successes including:
 - expansion of Needle and Syringe Program (NSP) sites across WA
 - establishment of a Hepatitis C Clinic at Next Step
- Hepatitis online education for General Practitioners (GPs), nurses and health care professionals through Edith Cowan University <http://hepatitis.ecu.edu.au>
- Workforce initiatives:
 - online NSP training provided by the Drug and Alcohol Office and WA Health <http://www.dao.health.wa.gov.au/nsp/>
 - community-based, sustainable funding increases for workforce development
 - ongoing Sexual Health and Blood Borne Virus (SHBBV) quarterly forums
 - maintaining services of HCV nurses across the Great Southern and Southwest regions
 - presentations at conferences by providers with experience.

- New partnerships:
 - WA Sexual Health and Blood-borne Virus: Applied Research and Evaluation Network (SiREN)
 - Aboriginal Health Council of WA and SHBBV Program
 - Local Aboriginal Community Health Services, tertiary hospitals in Perth and Department of Corrective Services to deliver care across these organisations
 - Hepatitis Australia, Hepatitis WA, ECU and other research and educational institutions as well as other non-government organisations including the Cancer Council.
- Research project:
 - Release of the final report of the Structures and Resources in the Management of Hepatitis C funded by the WA Health. This provides essential information for better coordination of patient management and workforce planning and is available at <http://www.healthnetworks.health.wa.gov.au/network/infections.cfm>

In Progress

- Research project: Treatment uptake in prisons – national collaboration project funded by NHMRC. The project examines the treatment uptake in prisons in NSW, WA and Queensland and addresses the barriers to treatment.
- HCV online learning modules: Recently updated to incorporate the approval of new drugs (Boceprevir and Telaprevir) for the treatment of HCV genotype I patients, and will require further updating as new treatments are approved.
- Education Program: Updates for GPs and nurses involved in the management of HCV through WA Health, Pharmaceutical Sponsorship, Australian Liver Association and the Australian Society of HIV Medicine.
- Partnership with the Australian Liver Association: Establishment of Chronic Diseases Faculty for education for GPs and nurses on a national level.

Challenges

- The support of a statewide implementation requires further resourcing, particularly if treatment access is to be improved.
- Some of the barriers to effective Hepatitis C treatment uptake include:
 - perceptions about the treatment efficacy and side effects
 - lack of knowledge and understanding of new treatments
- Lifestyle and disease management priorities. The need for better engagement and education for GPs to be involved in Sexually Transmitted Infection (STIs) and Blood Bourne Virus (BBVs) care and treatment.
- The need for integration of chronic disease models and community-based practices into disease management of BBVs so that care is co-managed with tertiary hospitals.
- Need to refocus on the following populations over the short term implementation:
 - at risk youth
 - overseas travellers at high risk of acquiring BBVs
 - Fly In Fly Out (FIFO) workers, especially those residing temporarily overseas
 - prison based populations.
- The improvement of services in rural and remote areas poses many complexities including:

- complex treatment regimes are difficult to implement and maintain
- inability to retain staff in remote/regional areas with appropriate cultural awareness training
- limited access to specialist nurses in Hepatology and BBVs
- limited patient access to antiviral therapy resulting from acute workforce shortage issues.
- While injecting drug users remain the highest priority group, there is a need to focus on other priority groups e.g. CALD and Aboriginal communities.
- The proposed coordinated HCV program using 'hub and spoke' concept connecting tertiary and rural centres will require funding to implement including: education and training, expanded roles of nurses in the management of chronic HCV and introduction of Nurse Practitioners and clinical nurse consultants.
- Workforce planning – in particular, improving access to specialist nurses for patient treatment and support and the need to integrate BBV services more extensively into general practice.
- Development of a state-wide database does not seem to be possible in the near future – a key element in the implementation of the state-wide Model.
- Restructuring of South Metropolitan Health Service with downsizing of RPH and FHHS has delayed the current planning for HCV services into the future. The RPH Department of Gastroenterology and Hepatology has been asked to make a 22% reduction in services.
- The limited uptake by GPs in managing patients with Hepatitis C (and B) due in part to complex treatment and disease management protocols, and the lack of community based hepatitis nurse support in some regions.

Future Priorities

Priorities are aligned with priority actions identified in the Fourth National Hepatitis C Strategy 2014-2017:

- Support and implement appropriate models of care for primary healthcare, drug and alcohol services, health services in custodial settings, Aboriginal community-controlled health services and community health services.
- Continue to support increased access to evidence-based harm-reduction and drug treatment programs, including NSPs, peer education and opioid pharmacotherapy programs.
- Improve awareness and knowledge of Hepatitis C in the health workforce.

Conclusion

Some of the current strategies of the HCV Model are already in place. Further progression towards achieving the recommendations in the state-wide Model requires additional resourcing and funding.

A new state strategy is planned at the expiry of the current MOC Implementation Plan (2010-2014).



Model of Care:	Anaphylaxis
Network responsible:	Infections and Immunology Health Network
Endorsed/noted by SHEF:	September 2013

Introduction

The Anaphylaxis Model of Care for WA aims to consider each stage of the disease continuum and propose a number of strategies to provide consumer-focussed, best practice care. As such, health promotion and disease prevention strategies are included that target the well population who have no identified allergic disease or incidence of anaphylaxis. Secondary prevention strategies are described targeting the 'at risk' population who have an identified allergic disease and are at a higher risk of anaphylaxis. Tertiary prevention strategies to manage acute episodes of anaphylaxis and care for those individuals at risk of recurrence are also described.

The aim of the Model is to:

- minimise the number of people having acute anaphylactic reactions by enhanced prevention and intervention strategies
- ensure that anaphylaxis is recognised within the community and first aid is promptly and appropriately provided
- ensure that acute management of anaphylaxis by health professionals is based on evidence based guidelines
- minimise the risk of recurrent anaphylaxis.

In Progress

- Education of health professionals has improved with the availability of Australasian Society of Clinical Immunology Allergy's (ASCIA) Anaphylaxis e-training for health professionals, however uptake of these programs can be improved. Consideration should be given to promoting these programs.
- The newly formed ASCIA Drug Allergy working party and the WA Clinical Immunology Subgroup of the Infections and Immunology Health Network are discussing options to address drug allergy. A comprehensive Model for management of drug allergy is not included within the scope of this Model and it was noted as an area to address separately. Allocation of resources to support the development of a Drug Allergy Model of Care is considered a priority by ASCIA and the Subgroup.

Challenges

Recommendations that have NOT been acted on include:

- The development of a business case to support the implementation of the Model; this includes funding for a project officer or similar support has not occurred.
- There has been no allocation of additional resources (to increase work force capacity and increase level of planning and collaboration).
- The development of a patient information system to improve coding (need to differentiate between mild-moderate allergic reactions and severe), identify causal factors, assist diagnoses, and streamline referrals has not occurred.
- There has not been a sustainable education and awareness campaign to inform community members about anaphylaxis.

- Further work is required to improve pathways and/or service delivery models to enact a smooth transition from paediatric to adult immunology/allergy services.
- There needs to be improved planning and collaboration in outpatient and community based support services for people at risk of anaphylaxis to ensure individuals are supported and receive need-specific referral and timely access to allied health professionals
- There needs to be improved access to services for rural and remote individuals at risk of anaphylaxis
- There has not been an anaphylaxis program targeting high risk groups (e.g. pre-teens/teens/young adults)
- A review of current WA hospital food service provision in relation to safety of meals provided to food allergic individuals is needed. This includes development of a standard training package for hospital food service staff to ensure consistent training across sites and development of recommendations for food service that can be adopted across hospital sites
- There needs to be further education of food service sector and Environmental Health officers.

Level of education and training provided to all health professionals regarding primary, secondary and tertiary care regarding anaphylaxis also needs to be improved. Patients are often not provided with one or more of the following after their first anaphylactic reaction:

- education
- adrenaline autoinjector (or a script to acquire one)
- endorsed personal action plan for anaphylaxis

Copies of an ASCIA led Australian Prescriber standardised acute anaphylaxis management protocol have been distributed to WA Emergency Departments and nursing stations and consideration should be given to distributing to private hospitals and general practice.

Access to an appropriately trained specialist within a timely manner according to the consumer's needs continues to be a problem. This is due to the continued rise in allergic diseases with 10% of infants in WA estimated to have a challenge documented food allergy.

Future Priorities

1. Development of a business case to support implementation of the Model.
2. Whilst we wait for the business case to be developed and approved, there is an immediate need for allocation of additional resources to increase workforce capacity and to increase level of planning and collaboration. This includes funding for clinical immunologists, nurses, allied health, GPs and physicians/paediatricians with an interest in allergy. Access to an appropriately trained specialist is an increasing problem.
3. Development of improved pathways and/or service delivery models to enact a smooth transition from paediatric to adult immunology/allergy services - this must include an anaphylaxis program targeting pre-teens/young adults.

Conclusion

Due to the limited duration since the Model was endorsed by SHEF there has been limited opportunity to progress the implementation of this Model.

Level of Implementation

Level 1: Little/no progress

Model of Care:	Human Immunodeficiency Virus (HIV)
Network responsible:	Infections and Immunology Health Network
Endorsed/noted by SHEF:	March 2008

Introduction

The HIV Model of Care aims to describe best practice care and services within the WA healthcare system for a person or population group prior to infection and as they progress through the stages of testing, treatment and care for HIV/AIDS. It outlines a number of recommendations for primary prevention; secondary prevention and early detection; disease management and tertiary prevention and workforce development.

The HIV Model is supported by the HIV Model of Care Implementation Plan 2010 – 2014 that incorporated a Memorandum of Understanding between all major stakeholders.

Achievements

Increased HIV testing and peer support within men who have sex with men (MSM) populations:

- Establishment of the M Clinic and sauna clinic, with evidence of earlier diagnosis among frequently-tested MSM clients.
- Provision of care to complex-needs patients:
- Establishment of the Supporting Health and Personal Empowerment (SHAPE) program within the WA AIDS Council, providing community-based support to complex-needs patients. This service is well utilised and currently operating near capacity. Funded by WA Health Sexual Health and Blood-Borne Virus Program (SHBBVP) this program replaces the previous work undertaken by Ruah Community Services.

Promotion of HIV Nurse Practitioner training:

- Provision of support from SHBBVP and Curtin University for HIV Nurse Practitioner candidacy (undertaken).
- Ongoing prevention of HIV acquisition/transmission among injecting drug users:
- Ongoing provision of needle and syringe programs and education programs.
- Education and training for primary care providers
- In collaboration with the Australasian Society for HIV Medicine, HIV education has been provided to GPs, practice nurses and other health care providers.

In Progress

Introduction of Point of Care Testing (PoCT) technologies in community settings:

- Pilot project at a community-based site is nearing completion and another pilot at RPH Sexual Health Clinic is due to begin in the 2014-2015 financial year to build on Therapeutic Goods Administration approval for new technologies to reach key populations.

Engagement with Australasian Society for HIV Medicine

- Engagement with Australasian Society for HIV Medicine -coordinated training and education programs for health practitioners.

HIV Health Economics project:

- Establishment and implementation of a HIV Costing project involving collaborative engagement between WA Health's SHBBVP, Epidemiology Branch, Data Linkage Branch, hospital HIV database and pharmacy data, and Health Economics (Curtin University). A primary analysis has been undertaken and early findings were presented at a public seminar in July 2014.

Implementation plan

- Plans for the next iteration WA HIV Strategy are underway and will align with the newly released Seventh National HIV Strategy 2014-2017.

Development of updated WA Operational Directive on non-occupational post-exposure prophylaxis (nPEP)

- Following the release of the new national PEP guidelines, a draft operational directive has been developed by WA Health's SHBBVP in consultation with key stakeholders. Further consultation is still being undertaken but the document should be finalised by the end of 2014.

Development of WA position on pre-exposure prophylaxis (PrEP)

- A short discussion paper has been developed and initial discussions with key stakeholders have taken place to help to determine what position WA should take around PrEP. Further consultation is required and the development of a fact sheet has been proposed.

Challenges

Resource challenges:

- Currently there are resource challenges limiting further implementation of the HIV Model of Care and the Implementation Strategy.
- There is no consumer, research and non-government organisation representation in the development of HIV care arrangements.

Increasing HIV population size due to improved prognosis as well as increasing new diagnoses:

- Ongoing increases in HIV notifications as well as interstate transfers with a net gain of ~100 new HIV cases per year – largely into tertiary hospital centres.
- In this setting, the estimated size of the 'active' RPH HIV cohort is now ~1,300 patients, making it one of the largest HIV clinical services in Australia.
- Increasing case complexity including migrant populations (with additional problems associated with Medicare ineligibility and lack of pre-migration HIV testing among temporary visa holders), managed pregnancies (~10-15 per year), and increasing HIV diagnoses among older heterosexual men who work under Fly In-Fly Out (FIFO) arrangements and who travel and/or live overseas.

Increasing demographic and geographic diversity of HIV cases:

- As above. Increased FIFO work and overseas travel has contributed to increasing diagnoses of HIV as well as other STIs in the Pilbara and other regional centres, with growing concern that testing strategies are insufficient in these areas to reveal the true HIV incidence.
- Increasing HIV diagnoses since ~2005 within migrant populations, consistent with population trends in WA over the same time period that reflect overseas migration as the dominant determinant of population growth.
 - Note that HIV testing is only mandatory for permanent residency applications (apart from temporary visa holders working in health care), without consideration of the underlying prevalence of HIV in the country-of-origin.

HIV workforce issues:

- Current resources, particularly in the tertiary hospital setting, are insufficient to meet the needs of HIV service delivery into the future, and the increasing number of patients with HIV infection who require regular review are contributing to increasing waiting times and reduced access for other patients within the hospital-based immunology service. Similarly, many patients who have been living with HIV for many years and who are in a 'low case complexity' category are experiencing long clinic waiting times and inefficiencies of service due to the large overall caseload at tertiary hospital centres (as well as at the only high-HIV-caseload GP service located in Mt Lawley which has 3 HIV 's100' prescribers - the only prescribers outside of the hospital setting in WA).

Dependence of HIV management on hospital clinical services:

- HIV care arrangements remain largely 'siloes' within individual hospital departments, with little opportunity to engage/collaborate with public health or community-based services apart from through informal communication networks.
- Despite the recommendation of the HIV Model of Care with regard to workforce development (both in the hospital setting and in the community), clinical service provision still depends almost entirely on hospital medical administration.
- No system is in place to facilitate the development of outreach services to regional centres (currently negotiated independently with the Kimberley, Pilbara and Goldfields regions).
- Current hospital planning and workforce strategies are focused primarily on inpatient-based care, rather than the provision of specialised outpatient-based services such as HIV management. Hence, immunology services in particular have been classified as 'low risk' of future workforce shortages due to underestimation of the requirements for outpatient-based care.

Lack of progress on HIV clinical database upgrade:

- The existing HIV clinical database has been in continuous use since 1994, and is now operating beyond its functional capacity (ie. the number of HIV medications now exceeds the available fields for data entry) and is being maintained on an obsolete platform.
- Progress towards upgrading this critical clinical resource is restricted by other competing Health Information Network (HIN) priorities.

Limited investment in the monitoring and evaluating of health outcomes:

- As noted in the Mid-Term Review of the HIV Model of Care, almost no data could be evaluated that related to treatment and quality of life among individuals living with HIV. This is predominantly as data collection was entirely dependent on ongoing funding of HIV Futures surveys (presently coordinated through La Trobe University in Melbourne).

Future Priorities

Priorities are aligned with priority actions identified in the Seventh National HIV Strategy 2014-2017:

- Build the knowledge, skills and capacity of priority populations, primary care providers and policy makers to establish innovative HIV risk-reduction programs and activities.
- Increase access to and uptake of voluntary and appropriate HIV testing among people from priority populations, particularly gay men and other men who have sex with men.
- Ensure that priority populations and healthcare professionals are aware of the individual and public health benefits of earlier commencement of treatment.

Conclusion

There has been positive progress in the implementation of the HIV Model of Care yet there are still a number of challenges moving forward. A new state strategy is planned at the expiry of the current Model Implementation Plan (2010-2014). The [Midterm review of the HIV Model of Care Implementation Plan](#) provides further information.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Sexually Transmitted Infections (STI)
Network responsible:	Infections and Immunology Health Network
Endorsed/noted by SHEF:	December 2007

Introduction

The Model of Care for Sexually Transmitted Infections (STIs) aims to describe best practice care and services within the WA healthcare system for a person or population group prior to and following diagnosis of an STI. It complements the Human Immunodeficiency Virus (HIV) and the Hepatitis C Virus Models of Care. The intended outcomes of an effective and integrated STI Model are to:

- reduce the rates of STIs in WA
- increase the levels of STI testing
- improve screening and treatment of STIs within mainstream and high-risk populations
- improve access to appropriate sexual health services
- increase the number of skilled practitioners in the workforce
- increase the yield in contact tracing of index cases and named contacts.

The Model is supported by the Sexually Transmitted Infections Model of Care Implementation Plan 2010 – 2014 which incorporates a Memorandum of Understanding between all major stakeholders.

Achievements

Due to the work of the WA Health Sexual Health and Blood Borne Virus (SHBBV) program within the WA Health, community stakeholders and other areas of the WA healthcare system there have been some good achievements including:

- establishment of the M Clinic where over 2,500 men who have sex with men have been seen over three years - regular HIV and STI testing has resulted in early detection and treatment. The clinic provides an opportunity to normalise testing, as well as health promotion
- website for youth <http://www.getthefacts.health.wa.gov.au/>
- online chlamydia testing with a positivity rate of ~ 12% indicating appropriate testing
- web-based education for teachers established
- development of an excellent educational resource for parents
- improved contact tracing services in the metropolitan area with new positions established in the south metropolitan area
- development of the "Talk Soon Talk Often Guide" for parents and children
- improved access to education and training for primary care providers such as Australasian Society for HIV Medicine courses and online modules provided by Edith Cowan University <http://sti.edu.au>
- continued support of clinical placements for GPs and rural nurses
- increased chlamydia and gonorrhoea testing rates over the period 2009 to 2011.

A number of new partnerships have emerged during the course of the Model and Implementation plan being enacted, these include:

- WA Sexual health and blood borne virus Applied Research and Evaluation Network
- SHBBVP and the Aboriginal Health Council of WA
- WA Health and Department of Education for online teacher professional development
- Aboriginal Community Controlled Health Services, Metropolitan Tertiary Hospitals and the Department of Corrective Services.

In Progress

- A/DG has approved a review of sexual health clinical services aimed at identifying gaps in current services - this should be completed by the first quarter of 2015
- Safe sex campaigns continue though with limited funding and therefore limited awareness
- Review of relevant legislation
- Improving access to testing in Emergency Departments - current program in the Kimberley needs to be promoted
- Improving surveillance by linking to testing data – progress is hindered as not all laboratories participate and addressing this is a priority
- Public Health Unit's in rural settings provide some sexual health services.
- The mid-term reviews of the Model showed significant achievement made in primary and secondary prevention of STI/BBV, work force development and health promotion
- Plans for the next WA STI Strategy are underway and will align with the newly released Third National Sexually Transmissible Infections Strategy 2014-2017.

Challenges

- Current challenges for the provision of sexual health services by the Health Services include:
 - Health Services have not invested as widely as anticipated in new sexual health clinical services since the Model's release. There is no sexual health service currently provided across North Metropolitan Health Service.
 - Current services are under threat with further commitment required to staff outreach services by medical officers and appropriately trained advance practice nurses under the auspices of sexual health physicians at central clinics. The review of sexual health clinical services may help to address this.
 - Concerns on progress within the tertiary care sector in reorienting health services and opening up shared care models of care.
- No progress on advanced practice nurses - awaiting Poison's Act reform .
- Implementation plans that are time framed, appropriately resourced, monitored and evaluated are required.
- There is no compulsory sex education in schools.
- There are a number of new and emerging trends and challenges, including the rapid testing of STIs.

- The need for better engagement and education of General Practitioners to be involved in STI care and treatment.
- Ongoing challenge with implementing and maintaining complex care and treatment regimes in rural and remote locations.
- There are high rates of STIs in Aboriginal populations and the difficulties in reaching these populations for STI testing and management.
- Emerging communities of interest include the Fly-In Fly-Out (FIFO) workers both locally and from South-east Asia as well as Culturally and Linguistic Diverse (CALD) population groups. Other high risk groups included Aboriginal populations, overseas travellers, prison populations and at risk youth.
- No new surveillance measures such as the electronic notification, syphilis database.
- There needs to be recognition that WA is bound by national strategies and reforms. The Australian Government is a signatory to the United Nations Political Declaration on HIV and bold targets have been set to reduce the incidence and prevalence of HIV and increase access to treatment. There will be pressure on WA to have implementation plans in place after the national strategies for HIV, STI, Hepatitis B and C are released in mid-2014.

Future Priorities

The Third National Sexually Transmissible Infections Strategy 2014-2017 will provide impetus for new initiatives. Priorities for Model implementation should align with priority actions identified in the strategy including:

- increase promotion of safer sex and regular testing
- build on successful activities to improve testing rates and coverage in priority populations
- assess and implement effective tools and activities to improve STI treatment, management and referral.

Conclusion

There has been positive progress of implementation in community settings, particularly due to the contribution of WA Health's SHBBVP. However, a renewed focus on tertiary supported services is required in the future.

A major revision of the STI Model of Care is not required at this time. A new state strategy is planned at the expiry of the current Model Implementation Plan (2010-2014).

The [Mid term review of the STI Model of Care Implementation Plan](#) provides further information.

Level of Implementation
Level 2: Partial implementation

Injury and Trauma Health Network

Burn Injury

Model of Care:	Burn Injury
Network responsible:	Injury & Trauma Health Network
Endorsed/noted by SHEF:	May 2009

Introduction

The purpose of the Burn Injury Model of Care is to provide a brief overview of the service delivery models available nationally and the current status of the WA Burns Services. It also clearly articulates a model of care across the state to improve equitable access to services that will prevent Burn Injury, provide better Burn Injury first aid and on-going care for all WA burn injured patients. This will ultimately have had an impact on hospitalisation rates and care outcomes.

Furthermore the development of this Model is a key strategy to address Objective 1: Reduce Burden of Disease, within the WA Non-Major Trauma Framework.

The Model outlines 12 key recommendations to shape clinical service delivery in the areas of prevention and first aid education, particularly for at risk groups, clinical care and associated translation of research into practice, best use of ehealth technologies for treatment and education across various clinical and non-clinical settings, focus on care closer to home with opportunities for specialisation in burn injury care across the state and raising the profile of burns management in disaster preparedness.

Achievements

Prevention and early management:

- The Princess Margaret Hospital (PMH) Total Care Burns Unit developed and evaluated a collection of brochures highlighting preventable childhood injuries at the various developmental stages. These are used to opportunistically educate families who present to the PMH Total Care Burns Unit.
- The PMH Total Care Burns Unit staff actively contribute to the Australian and New Zealand Burns Association Prevention Committee to develop and implement national and local burns prevention strategies and burns prevention education.
- Burns injury prevention is included in injury prevention programs statewide
- In 2014 WA Health funded Kidsafe (non-government organisation) to expand its child safety programs in rural and remote areas.
- Burn first aid is included in all first aid training courses, with on-line modules available.

Statewide e-health services

- PMH Burns Telehealth Service delivers a comprehensive multidisciplinary state-wide burns education program via videoconference for clinicians each month. They have integrated the acute, rehabilitative and educational components of the PMH Burns Telehealth Service into service delivery at PMH, achieving substantial savings to WA Health due to a reduction in avoided unnecessary patient transfers and admissions, avoided Patient Assisted Travel Scheme costs, reduced inpatient bed days for rural/remote patients and improved collaboration and communication between rural/remote clinicians and the PMH Burns multidisciplinary team.

Excellence in clinical care:

- The PMH Total Care Burns Unit completed and published a prospective randomised clinical trial comparing the use of Biobrane with and without Recell in the paediatric burns patient.
- Guidelines for use of Nanocrystalline Silver Dressing - Acticoat™ were developed in 2012 and integrated into burns services statewide eg. WoundsWest uses the guidelines for post-burns care. They are due for review in 2016.
- A comprehensive Burns Infection Control Bundle which has reduced the inpatient paediatric burns infection rate at PMH to 0%. This was recognised in the 2013 Child & Adolescent Health Service Accreditation as a “met with merit” achievement for the organisation.
- Outcome driven clinical care is fostered via a philosophy that every health care service in the state is part of the Burns Service as measured by a suite of key performance indicators. For example, care on admission as measured via these indicators reflects which regional and remote services need collegial support to meet agreed standards of care.

Integration back into the community

- The PMH Total Care Burns Unit increased collaboration with parents and caregivers through a variety of consumer satisfaction and feedback projects, with suggested changes successfully implemented in response to this feedback.
- Other innovations include a new clinical flow chart for the self-management program, patient and carer engagement in line with chronic disease self-management principles inclusive of a minor burn DVD.
- Inclusion of community rehabilitation in education modules raises awareness of these strategies and support systems for consumers and health professionals.
- RPH, Burns Unit promotes self-management program services.

Workforce

- The PMH Total Care Burns Unit successfully developed and established an ongoing targeted paediatric burns nursing retention program to increase nursing job satisfaction, improve nursing retention, facilitate professional development, enhance person-centred care and facilitate successful transition to the Perth Children's Hospital.
- A self-directed on line burn injury management learning module is available via WoundsWest to facilitate learning based on agreed standards

In Progress

- The RPH burns service is preparing for the move to the FSH. This involves reviewing all protocols to ensure they are still current and applicable.
- An update on burns injury is being provided to emergency department and intensive care unit staff to ensure standardisation of best care.
- The Burns Information Management System (BIMS) is the first web-based paperless record system in Australia, currently in clinical use for burn patients. The system has integrated the collection of the 400+ data points of the Burn Minimum Dataset; the Burn Outcome Measurement Battery; and, hospital laboratory and theatre systems, which is invaluable for both clinical and research data quality.
- The PMH Total Care Burns Unit multidisciplinary team continues to collaborate with the planners for the PCH to ensure the continued optimal development of the new Total Care Burns Unit from 2015 onwards.

Translating Research into Practice

The key strength of the burn injury management team which is inclusive of carers and consumers, is the bringing together of basic science, population health research and clinical research, Translating Research into Practice. This has been achieved as indicated by the team's most recent publications and current research projects (available on request).

Challenges

Resource issues such as funding and workforce capacity are barriers to the successful implementation of some recommendations within the model and are a challenge for the ongoing successful implementation of aspects of current clinical care.

- Access to dedicated burns psychiatric and dietetic services remains problematic, particularly for PMH families, especially when they are no longer an inpatient or when they live in rural/ remote areas.
- Recurrent/permanent embedded clinical research funding is often not available.

Future Priorities

- Finalising protocols and processes at the new hospitals in Perth.
- Expanding the telehealth clinical support and training service.

Conclusion

The Burn Injury Model of Care highlights the reality that every intervention from the time of injury influences the scar worn for life. All the work is focused on solving a given clinical problem across the spectrum from first aid practices in the community, manipulation of scars at the cellular level, to understanding the barriers to improved function.

The Burn Injury Model of Care is considered to be substantially implemented.

Level of Implementation

Level 3: Substantial implementation

Morbid Obesity Health Network

WA Morbid Obesity

Model of Care:	WA Morbid Obesity
Network responsible:	Morbid Obesity Health Network (limited time group formed for the writing of the Model)
Endorsed/noted by SHEF:	May 2008

Introduction

The Morbid Obesity model of care initiated from a Western Australian Health Networks convened meeting, the '*Obesity Think Tank*', held in February 2007. Gaps were identified in clinical treatment and services for the morbidly obese. A discussion paper was developed to support the need for a morbid obesity model of care and a morbid obesity consultation workshop was then held in November 2007. Key issues, needs, concerns and solutions in management of morbidly obese patients in Western Australia (WA) were discussed at the workshop. Priorities arose from this workshop, which guided development of the model of care. Four reference groups containing a cross section of expert health professionals, consumers, providers of primary care, Aboriginal Health, and Non-government organisations were also convened from the workshop for more extensive consultation and collaboration on the key priorities identified.

The model of care concentrates on and provides a number of recommendations regarding:

- Comprehensive primary care strategies for the management of morbid obesity
- The role of General Practice in the care of the morbidly obese
- Surgical interventions for treatment of morbid obesity
- Health care services, equipment and facility issues/initiatives

Special consideration is given to services provided for rural/remote areas, the Indigenous, Culturally and Linguistically Diverse (CALD) communities, paediatrics, maternity, and the elderly.

The model supports a multidisciplinary team approach with comprehensive guidelines, equipment and patient pathways and, associated highly complex individual case management processes. Morbid obesity care credentialing, training and education, as well as opportunities to pilot advanced therapies and conduct research using reliable data are also supported. Health promotion and prevention strategies integration across health, education and community development that give morbid obesity the same priority as other recognised chronic conditions within government agencies is also recommended.

Achievements

Prevention and early management:

- Most public and private tertiary services offer a multidisciplinary team approach to the management of morbid obesity. The team would typically include a surgeon, bariatric physician, dietitian, psychiatric/psychologist, exercise physiologist and nursing services, if the unit has fully adopted the NHMRC guidelines. 6 groups across WA have adopted these guidelines.
- Private and public services work collaboratively, particularly across the Joondalup Health Campus and Sir Charles Gairdner Hospital sites. Uptake of the NHMRC multi-disciplinary model in the private sector is very good at Joondalup and Mercy, moderately good at both SJOG sites.

Prevention and early management:

- Multi-disciplinary care in the management of obesity in primary care has potentially been enhanced through Medicare billable services through the Enhanced Primary Care initiative (five consults per annum) and access to psychological services (ten consults per annum). This approach aligns with WA Health's desire to increase the share of outpatient type services legitimately costed to Medicare. (*DoH, (2012) WA Health Bariatric Surgery Plan*).
- The DoH, Population Health Unit, obesity prevention campaigns such as the 'Live Lighter' campaign delivered by the Heart foundation on behalf the DoH delivers messages consistent with those that target prevention for morbid obesity.
- Public and private hospitals and clinical transport services in WA do have policies which include specialised services, equipment and facilities to manage morbid obesity in a dignified manner. Staff are trained in the special needs of this group as part of policy implementation.

In Progress

- In 2012 the DoH, Health Services improvement Unit developed the *WA Health Bariatric Surgery Plan – a standardised approach to surgery for obesity*. This document provides an overview of what has been achieved in terms of recommendation for surgical intervention and some comment on remaining gaps such as, agreed standards across the state.
- Monash University School of Medicine, Nursing and Health Science is the current federal tender holder to pilot a population-based registry involving a small number of public and private health services in Melbourne plus any number of Bariatric surgeon who are willing to contribute data to the registry. The registry funding is not adequate but federal funding commitments to support this via revenue from the new morbid obesity MBS items should address this when the pilot database has been fully tested. At present the data submitted is technical and of interest to surgeon. The long term view is to include public case data to enable both qualitative and quantitative search fields for researchers.
- WA will benefit from the outcomes of this pilot in terms of how best to establish a local network of database contributors to link into a national database.

- WA currently has access to reports created from the pilot data.

Challenges

- The notion of a database is sensitive for some when considering it from a patient's perspective. There is a perceived risk that people will not want to give consent to being listed within a dataset of 'obese people'. The outcomes of the Monash pilot may help to promote this recommendation locally.
- Winthrop Professor Jeff Hamdorf, Surgeon and Director of the Clinical Training and Evaluation Centre at the University of Western Australia, provided an overview and update of the Morbid Obesity Model of Care at the November 2013 clinical Senate debate. He shared lessons learnt and the key recommendations proposed stressing the importance of multidisciplinary involvement. His message was that we are not offering a dignified approach to care and that patients struggle for respect in both hospitals and the community.
- There are new MBS items to support morbid obesity management in the primary care sector. There is a strong network of GP's who are capable of providing care to those who have had gastric banding but are not entirely proficient due lack of exposure to cases. For this reason some surgeons are reluctant to refer to GP's outside of the Metro area.
- The public sector is not able to take full advantage of federal funding incentives largely due to Morbid Obesity not being recognised as a chronic disease. (is classified as such by American College of Surgeons)

Conclusion

This model was developed with a time limited working group and has not been supported by an ongoing Health Network. All of the recommendations have been implemented in parts of the WA Health system or in partnership with private and national associates.

Opinion on surgical intervention has changed somewhat since the writing of the MOC in 2008. These changes have been reflected in the *WA Health Bariatric Surgery Plan – a standardised approach to surgery for obesity (2012)*.

Ongoing work in this area is core business to health service providers.

As there is still some progress to be made in terms of making these recommendations ubiquitous to the WA system, it is recommended that the Model be reviewed by a small working group and re-submitted as a second edition, rather than totally revised.

Any rewrite of the Model should include consideration of alternative surgical methods now available in WA.

Level of Implementation

Level 3: Substantial implementation

Musculoskeletal Health Network

Elective Joint Replacement

Inflammatory Arthritis

Osteoporosis

Service model for community-based musculoskeletal health in WA

Spinal Pain

Model of Care:	Elective Joint Replacement Model of Care
Network responsible:	Musculoskeletal
Endorsed/noted by SHEF:	November 2010

Introduction

Elective joint replacement (EJR) surgery is a highly effective intervention for treating the symptoms of degenerative joint disease. By 2016, it is anticipated that the number of hip and knee joint replacements performed will double 2008 rates. A need for a coordinated and sustainable model of service delivery for elective joint replacement surgery in the public health system was identified. Poor coordination of services; a lack of consistency with referral processes to orthopaedic clinics; no standardised triage processes to ensure equity in access to orthopaedic clinics; an absence of standardised pre-assessment and pre-admission processes; poor consistency in post-operative care pathways; and diversity in the clinical and health facility services where EJR surgeries are performed were identified as substantial issues needing to be addressed. The implant tender process for the supply of hip and knee implants in the public system was noted as needing improved process measures and ongoing contract monitoring and management through clinical input, and the flexibility to change, based on emergent evidence. The Model describes a coordinated system of referral to orthopaedic clinics from GPs, as well as the components of optimal care from point of referral to rehabilitation, and long-term post-operative monitoring. The aim of the Model is to address issues and offer solutions to:

- Standardise and improve the patient pathway
- Increase efficiency, safety and quality in the services provided
- Meet the requirements for health facilities
- Ensure a skilled and competent workforce.

The Model integrates with documents current at that time, such as WA Health Strategic Intent 2005 – 2010; Clinical Services Framework; and is aligned with national and international priorities (eg. WHO Bone and Joint Decade, National Action Plan for Osteoarthritis, Rheumatoid Arthritis and Osteoporosis), as well as WA Chronic Health Conditions Framework 2011-2016.

Achievements

- Recommendation 6 advised a discharge summary be sent to the referring GP containing specific and pertinent details of the patient's perioperative journey. The Perth North Metro Medicare Local, in conjunction with Osborne Park Hospital, conducted a research project to determine the adequacy of discharge summaries for patients undergoing elective joint surgery. Findings from the project led to recommendations that a checklist be used for the discharge and additional information to be included within the discharge summary.

In Progress

- In 2011 a SHRAC grant was awarded to investigate “Cost effective joint replacement follow-up in WA: local implementation of the Elective Joint Replacement Service Model of Care” through the University of WA and FHHS.
- Recommendation 1 advised an electronic referral pathway should be established for patients to access outpatient orthopedic clinics after primary assessment by a GP. Despite projects undertaken by working groups, this outcome was not achieved. However, WA Health’s ‘Central Referral Service’ in the Health System Improvement Unit has an Electronic Referral Pathway that meets this recommendation. No further action is being taken in this respect.

Challenges

Engagement at the clinical level has been challenging. The chair of the EJR group has been absent from Musculoskeletal EAG meetings since 2009, and was consequently resigned from the group early in 2013. An EJR Clinical Network had been proposed for the Models implementation; however, members of this group were not clear on the intended roles despite Terms of Reference that had been developed to describe these. As such, the group was disbanded mid-2013. The EAG agreed to suspend the EJR component of the Network with the proviso that should any issues arise in the future, the EJR component would be revised.

Conclusion

The Model was noted in 2011 and there are currently no plans for a revision.

Level of Implementation
Level 3: Substantial implementation

Model of Care:	Inflammatory Arthritis Model of Care
Network responsible:	Musculoskeletal
Endorsed/noted by SHEF:	June 2009

Introduction

The Model of Care for Inflammatory Arthritis (IA) was developed in line with state health reforms and National priorities for musculoskeletal conditions. It sought to provide advice on delivering patient centred, sustainable, and effective health services across the continuum of care. The Model links to documents current at that time, such as WA Aboriginal Health Impact Statement and Guidelines; WA Chronic Disease Strategic Framework; National Chronic Disease Strategy; National Strategic Implementation Framework; and Declaration On Patient-centred Healthcare as adopted by the Health Consumers' Council (WA). The Model outlines current best evidence and practice in the delivery of patient care for people living with IA through the application of a set of service principles and recommendations across the continuum of health.

Achievements:

- Arthritis and Osteoporosis WA (AOWA) provide education, self-management, and train-the-trainer programs for Allied Health, and people with IA. AOWA are funded through the Better Health Initiative Programs (BeHIP) to coordinate, provide education, and measure outcomes of rheumatology services in rural regions. While some of the performance indicator reporting is still below target due to individual site reporting deficits, the majority of areas are compliant with reporting requirements and demonstrate appropriate levels of implementation and services.
- Development of a post-graduate certificate for Registered Nurses in Musculoskeletal Health through the Royal College of Nursing.
- Development of e-learning resources in rheumatology for allied health professionals in partnership between Curtin University and RPH.
- Recommendation 5 suggested "Access for adults and children with IA to a multidisciplinary team close to home to assess their needs and provide equitable access to appropriate intervention". BeHIP funding enabled a pilot project at Armadale Hospital to set up a multidisciplinary rheumatology clinic to provide care closer to home. The Armadale area was chosen as GIS postcode mapping indicated a large number of patients accessing services at RPH Shenton Park Campus (SPC) were from this catchment area. The pilot project funding ended June 2014. The aim was for multidisciplinary outpatient services for rheumatology patients coordinating with community-based services to provide a more integrated, consumer-focused model of care. Clinical governance, training and ongoing senior staff support was provided by RPH SPC. At the completion of the BeHIP contract, Armadale Health Campus has taken over the sustained funding of the project and included it in future base-funding. The future of the project will be as a 'spoke' of the South Metropolitan Health Service rheumatology service 'hub and spoke' model.
- Recommendation 26 advised a Chair of Rheumatology of Musculoskeletal Medicine be established. This post was established at the University of WA mid-2014 and has become and the Chair is an active member of the Musculoskeletal Health Network Executive Advisory Group.

In Progress

- The Model contained a total of 27 Recommendations. A working group will be formed to review the Recommendations with a view to determining those that are still relevant, and those that need support, as well as the type of resources that might be required in order for recommendations to be implemented. Due to the increased workload of the proposed Chair for this working group, establishment has been delayed until early 2015.

Challenges

- The Armadale project was slow to gain momentum due to several changes of project officers, and changes to other key personnel (Rheumatology Head of Department, Senior Development Officers for both, Musculoskeletal and BeHIP). Clarity around the initial project aims and intended outcomes needed articulation to re-orientate the team. The Executive Director of AHS will be providing a comprehensive project report that identifies the challenges, as well as what has worked well to allow application to similar future projects.
- Establishment of the Implementation Working Group has been delayed while the proposed Chair of the group is involved in the transition of SMHS services to FSH.
- Reconfiguration of metropolitan health services is impacting on the availability of Allied Health personnel for multi-disciplinary services.

Future Priorities

- Considerable concern has been expressed at many Executive Advisory Group meetings, about the lack of IA services available in the Northern suburbs of Perth, and the dwindling numbers of Rheumatologists available for rural and remote services. These issues will be a priority for the Network to consider in the future.

Conclusion

Implementation of the Model is ongoing and dependant on the findings of the working group. It is likely the Model will require revision in the near future, based on the findings and recommendations to the Musculoskeletal Health Network Executive Advisory Group, as it will then be 5-years since publication.

Level of Implementation

Level 1: Little/no progress

Model of Care:	Osteoporosis Model of Care
Network responsible:	Musculoskeletal
Endorsed/noted by SHEF:	August 2011

Introduction

Osteoporosis is a systemic skeletal condition characterised by low mass and micro-architectural deterioration of bone tissue, with a consequent increase in bone fragility. The global burden of disease imposed by osteoporosis, in particular fragility fractures, the projected population demographics for WA, and the current evidence-practice gap for osteoporosis management required a coordinated and integrated health service delivery model to deliver safe and high quality health care. The Osteoporosis Model of Care was developed by an interdisciplinary Working Group to address this need. The Model of Care integrates with documents current at that time, such as Falls Prevention, Orthogeriatric and Elective Joint Replacement Models of Care, the Clinical Services Framework, Activity-based funding policy, WA Primary Care Strategy and the WA Chronic Conditions Framework. The Model of Care was developed in alignment with key national and international strategies, including the National Service Improvement Framework for osteoarthritis, rheumatoid arthritis and osteoporosis, the Ontario Osteoporosis Strategy and the Royal Australia College of General Practice (RACGP) Clinical Guideline for the Prevention and Treatment of Osteoporosis in Postmenopausal Women and Older Men. The Model is presented in five focus areas: health promotion, lifetime fracture risk assessment, treatment, workforce development, and research and evaluation.

Achievements

- The Osteoporosis project lead (SCGH Rheumatologist) was awarded a SHRAC grant to evaluate a Fracture Liaison Service at SCGH for the period 2012 to 2014.
- Development of an access algorithm for off-Pharmaceutical Benefit Scheme (PBS) therapies for osteoporosis across WA, in collaboration with the Diabetes and Endocrine Health Network.
- The Network partnered with the Australian and New Zealand Bone and Mineral Society to host professional development opportunities in osteoporosis for health professionals during the 2012 annual scientific meeting in Perth.
- The Arthritis and Osteoporosis WA 'Bones and Joints School' was launched to aid promotion of maintaining healthy bones and joints in children with the long-term objective to reduce the incidence and effects of arthritis, osteoporosis and related conditions. The website is linked to the Australian Curriculum to educate on the basic elements of a healthy family lifestyle to develop good habits in childhood.

In Progress

- The Model contained a total of 28 Recommendations. A working group will be formed to review the Recommendations with a view to determining those that are still relevant, and those that need support, as well as the type of resources that might be required in order for the recommendations to be implemented. Establishment of this working group was initially planned for early 2014, however the identified lead was unable to progress this until later in the year.

Challenges

Formation of an Osteoporosis working group to look at implementation was considered following publication of the Model; however, due to changes in Health Networks personnel, there was delay in progressing this. A suitable chair for the proposed working group has been identified and, as such, progress should be early in 2015.

Future Priorities

- Support the Working Group to commence looking at key priority areas for implementation over the next 12-months.

Conclusion

Implementation of the Model is ongoing and dependant on the findings of the proposed working group. It is likely many of the recommendations are currently common practice but will benefit from a more comprehensive assessment by the group.

The Model was published in 2011 and is unlikely to require revision within the next few years.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Service Model for community-based Musculoskeletal Health in WA
Network responsible:	Musculoskeletal
Endorsed/noted by SHEF:	November 2013

Introduction

The purpose of the Service Model is to articulate the common service delivery recommendations across the existing Models of Care for musculoskeletal health and describe a model of coordinated and interdisciplinary care for consumers in WA with musculoskeletal health conditions.

Musculoskeletal conditions, specifically osteoarthritis, rheumatoid arthritis and osteoporosis have been recognised as Australian National Health Priority Areas since 2002, while the burden of musculoskeletal pain is emphasised in the Australian National Pain Strategy (2011). The burden of musculoskeletal health conditions is further compounded by the strong relationships between chronic pain and co-morbid health conditions. The disability experienced from musculoskeletal conditions inhibits the effective management of risk factors for other chronic health conditions such as heart disease, type II diabetes, chronic obstructive pulmonary disease and depression.

The Service Model is applicable to people of any age living with any one, or more complex or chronic musculoskeletal health condition(s) where consumer outcomes could be optimised using a coordinated and interdisciplinary model of service delivery. The Model recognises that many musculoskeletal health conditions can be managed effectively in the primary care sector by individual health practitioners (e.g. GPs, allied health professionals) in a mono-disciplinary model (e.g. acute musculoskeletal conditions) and may not require assessment and management from a dedicated, interdisciplinary service or coordination of service delivery from multiple providers or organisations. However, for people with complex and chronic musculoskeletal conditions (e.g. complex and persistent pain syndromes, inflammatory arthritis, severe osteoporosis; or a combination of these), evidence and clinical guidelines point to the consumer and system benefits of providing health services in a co-ordinated and interdisciplinary model, ideally with co-location of services and providers, and in cooperation with the primary care practitioner. For the rural and remote sector, the use of telehealth may be appropriate. The Model is aimed at those individuals tasked with planning and developing services for musculoskeletal health conditions, especially in community-based settings.

The Model of Care integrates with WA Health Strategic Intent 2010-2015; WA Spinal Pain Model of Care; WA Inflammatory Arthritis Model of Care; WA Elective Joint Replacement Service Model of Care; WA Osteoporosis Model of Care; WA Chronic Health Conditions Framework 2011-2016; WA Chronic Conditions Self-Management Strategic Framework 2011-2015; and the WA Primary Health Care Strategy.

A total of 17 external organisations agreed to publicly endorse or support the model.

Achievements

The Model has already been implemented in several areas:

- The STEPS program has been in use for several years at Fremantle Hospital Pain Medicine Unit and in 2013 was introduced to Perth North Metro Medicare Local, Bentley/Armadale Medicare Local, in 2014 to Rockingham/Kwinana area and is in use in two sites in Victoria.
- RPH and SCGH have similar programs in place.
- A recommendation of the Inflammatory Arthritis Model of Care was the establishment of a multi-disciplinary Rheumatology service. Armadale Hospital was the pilot site (funded through BeHIP) and helped to model the new 'hub and spoke' model of rehabilitation services in South Metropolitan Health Service.
- South West WA Medicare Local has a number of pilot programs that lend themselves to the model and are interested in establishing a musculoskeletal clinic at an Albany practice. How this will translate to the new Primary Health Networks is unknown at this stage.
- The President/Education Liaison Officer of the WA Practice Nurses Association uses the Model for chronic disease and arthritis management at her practice.

In Progress

- A working group was planned to determine and monitor further implementation of the model. This is yet to be progressed.

Challenges

This Model was first submitted for noting by SHEF in October 2012. Despite several submissions, actual tabling of the document was delayed due to changes at Executive level. The A/Director General (A/DG) requested minor amendments be made that would include: clearer reference to the specialist role in the Model; as well as a working model and the cost benefits of implementation. At the consequent forum where the amended Model was again tabled, the A/DG further requested feedback in relation to the implementation plans of the Model. This was responded to at the November 2013 meeting. A briefing is being prepared to detail the implementation to date, and the planned progression of the Model.

Future Priorities

- Use the Service Model to guide single service models across health services, for example, rehabilitation services and pain services.

Conclusion

The Model is still being disseminated and progressed.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Spinal Pain Model of Care
Network responsible:	Musculoskeletal
Endorsed/noted by SHEF:	April 2009

Introduction

Spinal pain is the most common musculoskeletal problem managed by GPs followed by arthritis. It places a high economic and personal burden on the community and the individual. The burden includes the use of hospital and primary care services, disruptions to daily life and lost productivity through functional limitations and activity restrictions. The Model was written with the aim of providing sustainable services for people living with spinal pain in WA, and included primary prevention and management across the continuum of health. Implementation of the Model will assist service delivery by:

- Promoting prevention of spinal pain through improved awareness and education
- Increasing the capacity of health professionals working with people living with spinal pain
- Encouraging appropriate management according to best practice principles in order to reduce the burden of chronic spinal pain conditions
- Improving access to services across the continuum of the condition, particularly in rural and remote regions (e.g. via telehealth consultation)
- Developing and implementing integrated interdisciplinary service models across the continuum of care.

The Model integrates with documents current at that time, such as WA Health Strategic Intent 2005 – 2010; Clinical Services Framework; and is aligned with national and international priorities (eg. WHO Bone and Joint Decade, National Action Plan for Osteoarthritis, Rheumatoid Arthritis and Osteoporosis); WA Aboriginal Health Impact Statement and Guidelines; WA Chronic Disease Strategic Framework and the National Chronic Disease Strategy.

Achievements

- Development and launch (April 2013) of the painHEALTH website, a combined initiative between WA Health, Curtin University and University of WA, Australian Pain Society and the Fremantle Pain Unit. The website hosts consumer-focussed and evidence-based information and skills about self-management for musculoskeletal pain. A secondary aim is to evaluate the usefulness of the information for consumers. No other websites of this nature exist in Australia. By August 2014, the website recorded 2,464,784 hits, 130,013 visitors, and has been accessed by 142 different countries.
- Development and launch (April 2013) of the painHEALTH website, a combined initiative between WA Health, Curtin University and University of WA, Australian Pain Society and the Fremantle Pain Unit. The website hosts consumer-focussed and evidence-based information and skills about self-management for musculoskeletal pain. A secondary aim is to evaluate the usefulness of the information for consumers. No other websites of this nature exist in Australia. By August 2014, the website recorded 2,464,784 hits, 130,013 visitors, and has been accessed by 142 different countries.

- The Self Training Educative Pain Sessions (STEPS) program developed at Fremantle Hospital has been integrated into two Medicare Locals to date, with plans to introduce the program to other sites through 2014.
- In 2010-11 a rural road-show was conducted to educate/up-skill consumers and health care professionals in active pain management strategies and in evidence-based, interdisciplinary management for spinal pain conditions. Project partners included Arthritis and Osteoporosis WA, Rural Health West, Curtin University and Fremantle Hospital. Forums were held in Kununurra, Broome, Albany and Kalgoorlie.
- The Pain Health Working Group has been established with the intent to review all pain related conditions and the likely outcome of a new Model that is more inclusive than just Spinal Pain.

In Progress

- The Model focused on a specific chronic pain condition. Given the huge burden of pain in Australia (in terms of humanitarian, health care and financial) the Musculoskeletal EAG and the State-Wide Pain Service forum agreed that a more comprehensive Model or Framework was required. Expressions of Interest were canvassed and a Working Group formed. A workshop in May 2014 generated four sub-groups to look at education of health professionals; education of the community; referral pathways; and funding and equity. The leads of each sub-group met in August 2014 and provided clear guidelines to progress their individual group work. A time-frame has been set to ensure that work is kept on track and delivers the planned product.
- The electronic Persistent Pain Outcomes Collaboration (ePPOC) was a new initiative developed through the Australian Health Services Research Institute (AHSRI) of the University of Wollongong. The initiative, aimed to support continuous improvement through national benchmarking of care and treatment, and in the quality and effectiveness of pain management in Australia was a result of a high priority recommendation of the National Pain Strategy (2011). The first year saw establishment of the Business Plan, clarification of the data set, recruitment of participating sites and formation of the Management Advisory Group and Scientific and Clinical Advisory Committee. SCGH Pain Management Unit is in the process of joining the collaborative, and RPH Pain Management Unit intends to join following transition of the unit from Shenton Park Campus to Wellington Street Campus.

Challenges

- The painHEALTH website platform is based at the University of WA, and managed by Curtin University. The Grant Agreement for development of the website ceased at the end of 2012 and, consequently, ongoing management of the website has since been provided 'in kind' and not funded. To ensure sustainability of this hugely successful resource, a new grant agreement is required as well as carefully considered governance guidelines.
- The ePPOC participation requires funding. Individual pain services do not have sufficient resources to commence participation. WA Health will fund the first year of participation, but the source of ongoing participating funding will need to be determined. The funding issue is a pending agenda item at the Australian Health Ministers Advisory Council.

Future Priorities

- Support the Pain Health Working Group to develop a new Pain Model of Care/Framework
- Ensure sustainability of the painHEALTH website with a new grant agreement and sound governance structure.
- Support all Pain Medicine Units to participate in the ePPOC.

Conclusion

- The Model was published in 2009. The Spinal Pain Model of Care won't be rewritten instead the issue of spinal pain will be considered and included within a more comprehensive Pain Health Framework or Model of Care as directed by the working group.
- The rural road-show, to educate/up-skill consumers and health care professionals in active pain management strategies and in evidence-based, interdisciplinary management for pain conditions, may be conducted again in 2014.

Level of Implementation

Level 3: Substantial implementation

Neurosciences and the Senses Health Network

WA Epilepsy Services

Motor Neurone Disease Services for Western Australia

Otitis Media

Model of Stroke Care

Model of Care:	WA Epilepsy Services Model of Care
Network responsible:	Neurosciences & the Senses Health Network
Endorsed/noted by SHEF:	February 2008

Introduction

The WA Epilepsy Services Model of Care provides key directions for the delivery of more efficient and equitable epilepsy care and clinical neurophysiology services in WA.

The Model contains 45 recommendations across 9 key areas including diagnosis, treatment, management and education.

The Model notes that full implementation will require additional staff with expertise in epilepsy, including training and ongoing administrative support for these posts.

Achievements

Whilst little progress has been made, the following achievements are noted:

- A “Consumer Guide to Epilepsy Services in WA’ was developed in 2010 which aligns with Recommendation 36.
- RPH has developed clinic checklists which are being used at RPH and FHHS by junior doctors to deliver appropriate information for patients, families and carers during clinic assessments (Recommendation 37).

In Progress

WA Health has a service agreement with the Epilepsy Association of WA. This contract sets out the services to be funded by WA Health and delivered by the Association. The services outlined in the service agreement are aligned to the Model and key implementation strategies in relation to information and education in epilepsy care. The aim of the contract is to support the Recommendations 36-40 under Section 1.8: Information and Education in Epilepsy Care.

- Consumer information has been provided on the new healthyWA website (Recommendation 36).
- The Association is reviewing existing resources that will meet Recommendation 37 – provision of a checklist to help healthcare professionals deliver appropriate information to patients, families and carers.
- The Training Centre in Subacute Care (TRACSWA) is developing a managing well neuro’ checklist for patients with chronic neurological conditions which may also be suitable to meet Recommendation 37.

Challenges

The most important step in achieving many of the aims of the Model is the provision of a state epilepsy service, which would encompass complex intra-operative monitoring and be independently managed and funded along the lines of the Neurological Intervention and Imaging Service of WA.

The current fragmentation of epilepsy care across the state with ongoing uncertainty regarding the geographical location of the state epilepsy service, integration of this with other major teaching hospitals and a contraction in the sessional commitments to epilepsy have all contributed to the lack of progress.

Whilst patient numbers have increased, capacity for key services such as Video EEG monitoring has decreased due to difficulties in recruiting and retaining staff as well as reduced resources due to other work priorities including monitoring of spinal and neurosurgery at multiple campuses.

Conclusion

Implementation of the Epilepsy Model has seen little progress since its development in February 2008.

There are a number of factors contributing to the lack of progress in the implementation of the Model. These include lack of access to funding for resources, workforce issues, uncertainty and competing issues as to where the service is to reside.



Level of Implementation

Level 1: Little/no progress

Model of Care:	Motor Neurone Disease Services for Western Australia
Network responsible:	Neurosciences & the Senses Health Network
Endorsed/noted by SHEF:	May 2008

Introduction

Motor Neurone Disease (MND) is a devastating, incurable and progressive neurological disease that has a significant impact on the lives of patients, their families and the community. Fifty percent of patients die within three years of symptom onset. Rate of disease progress varies, and prognosis worsens with an increased age of onset, low forced vital capacity, short time between first symptom to presentation and bulbar onset.

The management of MND has evolved over the last decade with a move towards coordinated multidisciplinary care that improves both the quality of life for patients and families and improves patient survival. Although incurable, there are treatment and management options that can make a significant difference for patients and families with MND.

Coordinated multidisciplinary care for patients with MND is essential at all levels of health care. This includes community based care, the general practitioner, private neurologist and community aged care facilities, as well as the specialised MND clinic. A planned and well managed disease course based on the needs and wishes of the person with MND assist in improving quality of life. This can also prolong survival whilst being cost effective in reducing unplanned and possibly unnecessary hospitalisations.

With planning and support, the majority of the care of patients with MND from diagnosis through to death can be provided in the community setting or in secondary hospitals closer to home if complications such as pneumonia arise. Only more specialised care would require the tertiary hospitals.

The Model reviews the multidisciplinary approach to the management of MND in WA, and provides recommendations in line with the Clinical Services Framework and the A Healthy Future for Western Australians: Report of the Health Reform Committee (Reid Report). The Model was developed to ensure people with MND get the right care, at the right time, by the right team and in the right place and provides seven recommendations.

People with MND and their carers have been consulted about their needs and wishes for support in living well with this diagnosis. In essence they have identified the need for care that is better coordinated, well-informed and tailored to their specific (and often rapidly changing) situation.

Achievements

- The Disability Service Commission (DSC) funded a pilot program in 2008 to provide a more timely, flexible and holistic approach for the under 65 age group with MND. Since implementation of the program there has been a significant reduction in ED and crisis hospital admissions for complications arising from MND, carer fatigue/stress.

- WA Health continues to provide funding to the MND WA that contributes to the provision of care advisory services as well as to provision of paid information and education support. The MND WA also offers a range of financial assistance services to people with MND,
- The RPH Shenton Park Campus Dietetics and Speech Pathology Services have developed theoretical and clinical expertise in the area of MND to support over 30 patients with the management of their nutritional, swallowing, speech and communication issues. They have developed MND specific handouts and brochures for Dietetic and Speech Pathology management. These achievements have been progressed with no funding.

In Progress

- MND WA is currently conducting a feasibility study to determine the cost effective and efficient way to address the critical area of quality care which will conclude in 2014
- The Dietetic and Speech Pathology Services have contributed to the Project Team for Fiona Stanley Hospital to discuss how MND might fit into the new SMHS structure
- Creation of data base to track MND patients attending Shenton Park Campus
- Creation of a shared MND calendar to schedule future outpatient appointments

Challenges

- Service deficiencies continue and require adjustments in line with the reconfiguration of the Health Services in the metropolitan area
- Lack of respite facilities for MND patients is still a major issue. Respite facilities that can provide the specialised care of patients with MND are needed. Such facilities should have staff trained in the care and facilities appropriate to patients with MND, who may be relatively young and have young families
- Continued deficit of coordinated services between providers
- Delineation between the Clinical Coordinator and the Care Advisor for MND with greater emphasis required on the differences between the two roles
- Lack of an integrated electronic data database to track patients, issue appointments and allow remote access to integrated electronic medical notes for all those involved in care across the various institutions (eg hospital, MND Association, Neurodegenerative Conditions Coordinated Care Program etc)
- Currently there is no provision for funded staff for Dietetics and Speech Pathology services. Funding would meet the need for these services to have the facility to offer regular and ongoing outreach services for patients who become too debilitated to attend as an outpatient
- The provision of clinically excellent Dietetics and Speech Pathology services inclusive of service to the rural area is yet to be addressed
- While the Model identified the need for Allied Health Services at community level, an acknowledgement that MND is a specialised area and the number of MND clients seen in the context of their service is small. There needs to be community clinicians with clinical expertise and knowledge in this area
- Opportunities for ongoing training and professional development in MND for Dieticians and Speech Pathologists in WA are non-existent

- In June 2012 concerns were raised via the Neurosciences and the Senses Executive Advisory Group, by the MND clinic at Royal Perth Hospital that the Model is out of date. It was noted that there had been a change in the care co-ordination packages available and locations of service provision, and it was proposed that the MND Model of Care committee be reconvened and the Model of Care reviewed. This review is now underway.

Conclusion

The MND Association of WA has recommended that the major changes from the previous Model incorporate one state multidisciplinary MND clinic at Fiona Stanley Hospital (FSH), as well as a clinic coordinator role at FSH and outreach to statewide services, currently underserved by incorporating a major telehealth component. This more formalised state service should link more intimately with palliative care or possible future palliative care clinics.

Issues around care for people with MND include a dedicated coordinator of the service, funding issues, workforce shortage, an outreach service and opportunities for professional development for staff who work in this field. Service delivery pathways for those presenting with MND requires development.

Level of Implementation

Level 1: Little/no progress

Model of Care:	Otitis Media Model of Care
Network responsible:	Neurosciences & the Senses Health Network
Endorsed/noted by SHEF:	January 2013

Introduction

Otitis Media (OM) is a common childhood illness, from which most children will recover quickly with appropriate treatment. Some population groups, however, have much higher rates of OM and also have unacceptably high rates of chronic suppurative OM (CSOM) with associated impact on hearing, language development and learning ability. Australian Aboriginal children have the highest prevalence (up to 70% in remote communities) of CSOM in the world.

This Model contains 10 key recommendations across prevention, primary care and specialist care.

Nationally, the recommendations for Clinical Guidelines for the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations were updated in 2011. In 2012 a WA Health Operational Directive was released for the clinical management of Otitis Media.

Achievements

- The CAHS metropolitan Child and Adolescent Community Health (CACH) division has formed an OM Reference Group to continue to progress strategies to improve responses to OM.
- Implementation of WA Health's Universal Child Health Contact Schedule which provides families with 6 contacts with a community health nurse from birth to school entry and a seventh school entry health assessment. A key element is health promotion and anticipatory guidance.
- The school entry health assessment routinely examines ears by otoscopy and screening audiology for all children from the age of 3.5 years, usually in kindergarten.
- All CAHS staff undertake Aboriginal cultural awareness training.
- In CACH the Aboriginal Health Team (AHT) has been formed to provide a culturally secure service to Aboriginal families who may not access mainstream services. They offer opportunistic ear health screening within the delivery of the Enhanced Aboriginal Child Health Schedule. This includes engagement with parents in play groups to improve health literacy, including ear health.
- CAHS, in addition to the surgical services provided through PMH, provides two dedicated ear health clinics with an outreach clinic every Wednesday at WA Institute for Deaf Education in Padbury WA. These clinics provide ear, nose and throat (ENT) specialist and Audiology. The CACH AHT delivers the Armadale Aboriginal Ear Health Clinic monthly, providing Audiology, ENT and health promotion services, including health education and Allied Health to Aboriginal families within the Armadale and surrounding suburbs. The AHT Kwinana/Peel Aboriginal Ear Health Clinic is delivered 4 times per year with the services of an ENT specialist.

- CACH AHT convenes an interagency network meeting that seeks to minimise duplication of services across the metropolitan Aboriginal community. A number of agencies attend this meeting; these services have commenced working in partnership.
- CAHS funds a mobile ear health screening and medical service for Aboriginal children 0 - 12 years of age and an ear clinic at the Wembley Telethon Speech and Hearing Centre (Ear Clinic). Telethon Speech and Hearing (TSH) Centre is the funded provider of both services.
- Redesign of the service requirements is being progressed in collaboration with the CACH Otitis Media Reference Group (OMRG) and other stakeholders, such as TSH.
- Inclusion of telehealth in design of services by the AHT offers opportunistic ear health screening within the delivery of the Enhanced Aboriginal Child Health Schedule. Video Otoscopy is used to explain ear disease to parents whilst visiting the families. Stored images are used for further consultation with medical officer and ENT specialist.
- WA Health, through the Environmental Health Directorate, funds an environmental health service for remote Aboriginal communities.
- Environmental Health Practitioners deliver a range of services to improve community conditions with a focus on the home environment.
- WACHS has made significant improvement in primary prevention and screening:
 - Routine screening of children by Child and School health nurses per the Universal and Enhanced Aboriginal Child Health Schedule; and as part of the school health program. Screening also occurs following parent and/or teacher referral. Identified children are referred to relevant service/specialty as required.
 - Provision of community and school-based health promotion/education programs.
 - In the Kimberley:
 - Aboriginal Health Workers are trained by the Ear Health Coordinators and are used for routine screening. They have also partnered with other agencies to promote the No Germs on Me Campaign.
 - The Kimberley Ear Health Program conducted by School Health nurses has seen excellent coverage of Aboriginal children aged 5-10 years. In the West Kimberley less than 1 % of children screened are referred to Audiology/ENT visiting specialist services from the town and peninsular schools. There has been a reduction in the Ear Pathology for children at La Grange Remote Community School at Bidadanga Community.
 - Children with Chronic Conductive Hearing Loss have been enabled to more actively participate in the classroom and learn due to the visiting Education Department teacher for the Deaf and the Australian Hearing Audiologist and, provision of hearing aids/hearing hats and increased use of the Sound Field Amplification System.

Achievements continued:

- In the Pilbara:
 - Telethon Speech and Hearing have been engaged to deliver audiology services, reducing waiting times.
 - A number of other ear health service providers have commenced with funding from the Commonwealth Government's Better Hearing funding.
- In the Goldfields:
 - Ngunyntju Tjitji Primi (NTP) have been funded by Rural Health West to provide audiology outreach visits for Aboriginal children in the 0-4 year age group (current funding ends Dec 2014). WACHS have supported this program, targeting the most at-risk and under-serviced population. This program has been working extremely well.
 - The Pina Palya, Pina Kuliku – Good Ears, Good Learning Research Project that was completed in 2012 increased awareness of the importance of ear health and professionally developed staff in the region, mainly AHWs, community health nurses and General Practice Nurses.
- In the Southwest practice has been streamlined in accordance with the Model via:
 - Prevention through health promotion by a multi-disciplinary team
 - Targeted screening of children at high risk, ie 0-4 year olds, Aboriginal children
 - Monitoring children at risk for OM
 - Primary health – referring for GP and/or ENT specialist assessments for early and effective treatment.
- WACHS have increased coordination across the patient journey:
 - Improved collaboration, networking and partnerships in the Great Southern region to reduce wait times by increasing local access.
 - Establishing the Kimberley Audiology Stakeholder group to improve service coordination by improving community, information sharing, support and service delivery amongst the various audiological service providers in the Kimberley.
 - Funding (by Rural Health West) of the Healthy Ears – Better Hearing, Better Listening (BHBL) project for children aged 0-21 years in the Wheatbelt with Moora, Merredin and Narrogin identified as priorities for expanded services.
 - 0.1 FTE of a WACHS Great Southern school health position allocated to ear health coordination.
 - Development of an ENT referral process in the Central Great Southern.
 - Fitting of Sound Field Amplification Systems in all school classrooms in the Kimberley.

In Progress

- The CACH Refugee Health Team will be reviewed in 2014 to align services to enhanced child health assessments to provide early intervention opportunities for OM.
- CACH is examining the value of introducing pneumatic otoscopy alongside existing ear health screening tests which include otoscopy, audiometry, and for Aboriginal Child Health Services, tympanometry assessment. Ethics approval is currently being sought with the support of Derbarl Yerrigan
- PMH ENT services are employing two audiology graduates commencing in 2014.
- The Metropolitan Child Development Service (CDS) provides speech pathology services for children with developmental delay, with a focus on early intervention (0-4 years).
- New funding committed to School Health Services over the next four years will be used to employ 8 Speech Pathologists who will provide services for school-aged clients at nominated Child and Parent Centres (CPCs) and/or the schools affiliated with these centres. The service model will include school-based speech and language services tailored to local community needs, and direct clinical services.
- Improving referral coordination to PMH from WACHS South West (through the newly funded School Health Nurse position) which will be used for Ear Health Coordination.
- The Improving Ear, Eye and Oral Health of Children in Aboriginal Rural and Remote Communities Election Commitment (four years from 2013/14) aims to improve delivery and coordination of health care across the ear, eye and oral health continuum to children living in rural and remote Aboriginal communities in the Kimberley, Pilbara, Midwest and Goldfields regions.
- Through the BHBL funding 5 outreach ENT visits have been conducted; with a further two planned for 2014. Further funding has been applied for 2015-2017 for four trips per annum.
- The Wheatbelt Regional Aboriginal Health Planning Forum are planning to establish a Regional Health Plan to improve coordination of services.
- The Wheatbelt Population Health Unit Primary Health Eastern Quality Improvement project aims to develop an ear health referral pathway and align local resources to deliver the Koolangka Mooditj Dwonk program (Kids Strong Ears).
- An interagency stakeholder group has been formed to develop a local model of care for the Pilbara.
- Professor Watson has been invited in the capacity of chair of the Neurosciences and Senses Health Network EAG to chair a steering committee which aims to develop collaborative strategies for research and intervention in ear health in Aboriginal children. The steering committee will involve about 10 individuals (representing such bodies as Telethon Kids, WACHS, Aboriginal Health Council of WA, Wesfarmers institute) and it is hoped that the meeting will develop an agenda for a larger stakeholder meeting in early 2015.
- Development of a WA Health workforce plan to build an OM primary care workforce:
 - In the Kimberley new and existing clinical staff are provided with education and training from the regional ear health coordinator
 - 18 Full-Time-Equivalent AHWs have been employed (72 part-time staff) as part of the Improving Ear, Eye and Oral Health of Children in Aboriginal Rural and Remote Communities Election Commitment. Their training program will include primary prevention, health checks, assessment, diagnosis and appropriate referral pathways.

Challenges

- Currently funding models are often short term with rigid criteria which can restrict innovation, health and service improvement and may not take into account the requirement for complex health issues to be addressed over time.
- Complex multiple funding providers can result in workforce mal-distribution, inequitable funding and service gaps and duplication of services.
- Difficulty recruiting and retaining qualified and experienced staff in regional and remote areas is a widespread issue.
- Lack of audiology services leading to long waiting lists for onward referral. Telehealth could be a significant enabler of improving access and changing the workforce mal-distribution however this is inhibited by current MBS funding for Telehealth-provided services and bandwidth issues in some remote communities.
- Some State and Commonwealth funding arrangements stipulate that the funds must be used to purchase services from the non-government organisation sector. Across all population health programs, including those relevant to the Model, this has been met with varying success.
- Community social norms can impact on progress, as for example in the Pilbara, it has become the norm for many families for children to have ear health conditions and thus prevention and treatment is not seen as important.
- Duplication of services from increasing numbers of Ear Health service providers in the Kimberley and Goldfields (eg Earbus visiting schools where WACHS AHWs and Nurses are already screening children and working with the families to improve ear health). WACHS and Rural Health West are undertaking a project to map current service providers to assist with allocating future funding and preventing service duplication.

Conclusion

The ten key recommendations identified in the Model have been addressed to varying degrees through the three pronged approach of prevention, primary health care; and specialist care.

CAHS continues to work toward developing a workforce plan to support child health nurses in remote communities to assist community based primary prevention programs which remain a priority.

WACHS have made considerable achievements in improving prevention, screening and treatment of Otitis Media.

Level of Implementation

Level 2: Partial implementation

Model of Care:	Model of Stroke Care (MSC)
Network responsible:	Neurosciences & the Senses Health Network
Endorsed/noted by SHEF:	May 2012

Introduction

- In 2006, the Neurosciences and the Senses Health Network developed the Model of Stroke Care for WA. This Model described then-current “Best Practice” for clinical stroke service delivery and mapped existing services against present and future demand to identify service gaps. It was updated in 2012 to reflect changes in both clinical “Best Practice” and provide a comprehensive picture of stroke services across the state.
- The 2012 Model took into account government policy decisions made since the publication of the previous Model of Stroke Care for WA 2006. These included the development of a range of new Models of Care and Guidelines by Health Networks such as Models of Care for Heart Failure and Acute Coronary Syndromes and the Protocol for Administering Alteplase in Acute Ischaemic Stroke. As well as the publication of the WA Health Clinical Services Framework 2010-2020, the WA Health Strategic Intent 2010-2015, Revitalising WA Country Health Service 2009 - 2012, WA Sub Acute Plan 2009-2013, National Stroke Foundation (NSF) Acute Services Framework 2011 and the NSF Clinical Guidelines for Stroke Management 2010. Consideration has also been given to the Clinically Co-ordinated Patient Transfer Model of Service Delivery, now known as the Emergency Telehealth Service (ETS), currently being developed for WA.
- The MSC 2012 outlined 16 key recommendations to shape current clinical service delivery.
- In 2008 and 2011, the WA Premier signed the National Partnership Agreements (NPAs) for Hospital and Health Workforce Reform (HHWR), and for Improving Public Hospital Services (IPHS), respectively. This delivered additional funding for subacute care, including stroke rehabilitation, and other key health areas.
- Additional rehabilitation stroke services funded through the NPAs are as follows:

NPA FUNDED STROKE SERVICES		
NPA	SERVICE	LOCATION
HHWR 2009-13	10 bed Secondary Stroke Unit North Metropolitan Health Service (NMHS)	Osborne Park Hospital (OPH)
	Stroke Outpatient Service NMHS	OPH
	10 bed Secondary Stroke Unit South Metropolitan Health Service (SMHS)	Bentley Health Service (BHS)
	Stroke Outpatient Service SMHS	BHS
IPHS 2011-14	Primary Stroke Centres WA Country Health Service (WACHS)	Great Southern
	Primary Stroke Centres WACHS	South West
	Primary Stroke Centre WACHS	Geraldton

	Primary Stroke Centre WACHS	Kalgoorlie
	Primary Stroke Centre WACHS	Wheatbelt
	Stroke Liaison WACHS	Kimberley/Pilbara
	Country-Metro Stroke Link Program	WACHS

Achievements

- As the above stroke services are within scope for ABF and are included as part of ongoing WA Health service delivery they will continue beyond the life of the NPAs.
- Regional Stroke Co-ordinators are now well established in the Goldfields, Great Southern, Kimberley, Pilbara, Mid-West and the South-West to facilitate seamless transition of patient care between sites.
- A Stroke Unit has opened at Rockingham General Hospital.
- OPH Stroke Early Supported Discharge (ESD) Service utilises an innovative “pulling” referral process resulting in earlier access, discharge and rehabilitation. Results include:
 - excellent functional outcomes for patients and carers
 - reduced length of hospital stays (resulting in cost savings)
 - enhanced multidisciplinary team approach
 - expansion of services to patients under 65 years of age
 - the service model is transferrable and suitable for broader implementation including adaptation for some rural settings.
- The WA Subacute Care Training Centre (TRACS WA) has been established through National Partnership Agreement funding to promote best practice, including best practice in subacute stroke care services.
- The Better Health Improvement Program (BeHIP) managed by DOH, funds a number of programs targeting chronic conditions and self-management approaches. Results from the Metropolitan Healthy Lifestyle Program funded under BeHIP have demonstrated significant reductions in blood pressure and cholesterol and increases in levels of physical activity.
- The Quick Reference Guide: Atrial Fibrillation (AF) Information for the Health Professional is currently being updated. The Guide will enable better assessment and treatment of AF which in turn will contribute to a reduction in preventable stroke, as AF is associated with a five-fold increase in stroke.
- Premium payments for stroke have been established through the Activity Based Funding framework to incentivise best practice care for stroke.
- WA has been acknowledged for its stroke services with Osborne Park Hospital receiving 3 of the 4 Stroke Society of Australasia “Excellence in Stroke” awards in Australia 2011-2012 and the 2013 National Lead Clinicians Award for Innovation Implementation of Clinical Guidelines as awarded by the Federal Minister of Health.
- 2013 Excellence in Service Delivery awarded to Rockingham General Hospital Comprehensive Stroke Unit.

In Progress

- Ongoing liaison with the State Neurology Planning committee about the framework for stroke services as RPH downsizes and FSH opens.
- Further work on patient flow and ambulance service interactions will be required as the above point evolves.
- There are opportunities to build stroke clinical services and research to a high level at the State Neurosciences Centre.
- Facilitated planning to 'map' interventional neuro-radiology services in respect to acute stroke at metropolitan tertiary hospitals is underway.

Challenges

- Due to workforce issues, the planned establishment of a formal implementation committee did not progress.
- Further consideration of workforce planning is needed. Efforts are being made to attract trainees from Eastern States and Overseas. Planning is also underway to establish a Clinical Stroke Fellowship at SCGH.
- The recommended Stroke Unit at Joondalup and Armadale – Kelmscott Hospital has not commenced.

Conclusion

- The Model remains current and no plans exist for revision at this stage. The Stroke Services Program will continue to address key areas of the Model including infrastructure, clinical practice, service delivery processes and protocols and, workforce development and training.
- Service Delivery for Stroke has been work shopped at FSH with SMHS and Health Networks.
- The Neurosciences and Senses Health Network are responsible for the monitoring the progression of recommendations in the Model.

Level of Implementation

Level 2: Partial implementation

Renal Health Network

Chronic Kidney Disease

Model of Care:	Chronic Kidney Disease Model of Care
Network responsible:	Renal Health Network (RHN)
Endorsed/noted by SHEF:	December 2007

Introduction

The Chronic Kidney Disease Model of Care (CKD MoC) identifies gaps in the current delivery of renal services and provides strategies to improve and integrate service provision for the different stages of the disease.

The Model has links to the Palliative Care Model of Care, WA Plan for Renal Dialysis Services 2008-2013, Framework to Improve Home Dialysis Therapy in WA (September, 2011), Pathway for Renal Palliative Care Services in WA (July 2012), Improving Vascular Access Services in WA report (October, 2012), Chronic Conditions Framework for WA and final draft of the statewide Quality Improvement Indicators for Renal Replacement Therapy (February 2013). Additionally WACHS has developed a Renal Dialysis Plan for 2010-2021.

The Model has sixteen recommendations. These recommendations are based on prevention, promotion, early detection and intervention, integration, continuity of care and self-management in accordance with the National Health Priority Action Council (2006).

The objectives of the Model are:

1. Preventing or delaying the onset of CKD
2. Preventing or slowing the progression of CKD and its complications, especially end-stage renal disease, heart disease, stroke and peripheral vascular disease
3. Improving the quality of life of people with CKD
4. Reducing CKD related presentations to tertiary hospital; and
5. Addressing the inequities in renal service provision, particularly for Aboriginal people and other disadvantaged groups.

The RHN is responsible for ensuring partnerships across public and community health and promoting the implementation of the recommendations of the Model. In addition to the RHN, the Renal Dialysis Reference Group (RDRG) was established in 2009. The role of the RDRG is to provide expert input and advice related to the operational components of an integrated Statewide Renal Dialysis Program. This includes the purchasing intentions, service planning, best practice and benchmarking, contract renewal and specifications, investments and introduction of new technology.

Achievements

- There has been improved national collaboration (SA, Vic, Qld and NSW).
- The RNH has been involved in developing 'de facto' State-wide Clinical Practice Standards
- State-wide home service development:
 - An independent review of the WA Home Dialysis Program (including peritoneal dialysis) was initiated by the RHN and completed in June 2012
 - There has been a reduction of peritonitis rates since the review.
 - The number of patients using home therapies has increased, with almost no waiting time and significant cost savings.
- Patient education:
 - Through the WA Renal Education Society (WARES) patient education occurs across Armadale Hospital and other tertiary hospitals including SCGH, RPH and FHHS. The WARES is active throughout the State.
- Workforce development:
 - A vascular coordinator and nurse have been contracted at FHHS. Activity has led to increased access to vascular services.
 - Increase in full-time-equivalent (FTE) of Nurse Educators has occurred at tertiary hospitals.
- The Renal Palliative Care Pathway has been endorsed by SHEF.
- A final draft of the Improving Vascular Access Services for Haemodialysis in WA report was submitted to the Operations Review Committee in March 2014.
- A final draft of the Quality Improvement Indicators for Renal Replacement Therapy report was submitted to the Chief Medical Officer in August 2014.
- The RHN has secured representation on the Australian National Chronic Kidney Disease Surveillance Collaboration and reports to the Chief Medical Officer on the national agenda and developments.
- The RHN Co-Leads have met with the A/Director-General of WA Health to lobby for a State-wide transplantation service overseen by a State-wide Director of Transplantation. The proposal is for the service to be equitably distributed and standardised between the existing two sites, while maintaining physician and patient choice and autonomy.
- There has been strong collaboration with the WA Cancer and Palliative Care Network and the WA Diabetes and Endocrine Health Network.

In Progress

- Development of the Renal Dialysis Plan 2015-2025.
- Assay of the prevalence of people with chronic kidney disease not on dialysis through the creation of data linkage across major pathology laboratories in WA.
- Appointment and training of medical and nursing FTE to meet service demand in Broome and Kalgoorlie.

Challenges

- There is currently no statewide electronic chronic disease management system. The prospect of further development in this area is delayed due to HIN's current priority of the FSH Commissioning Project. As an interim measure HIN has recently upgraded the WA Nephrology Database (WAND). There is a strong view amongst the nephrology community that WAND is dysfunctional and deficient in meeting chronic disease data management requirements. Issues related to WAND were raised in a joint letter in July 2013 to the Chief Medical Officer from the RHN co-leads and heads of department for Nephrology and Transplantation at SCGH, FHHS and PMH for Children. Despite specific recommendations being made, virtually no change has been achieved to date.
- The overall FTE for the renal health workforce is currently below international standards and WA has seen a further continued reduction in FTE in 2013-14.
- The shortfall of FTE is significant in rural and remote communities where the prevalence of CKD is relatively high amongst the Aboriginal population. There is currently no resident Renal Physician based outside metropolitan Perth. Staff who provide visiting services need enhanced professional support and a realistic workload. Where services do not exist due to lack of FTE, dialysis patients from rural and remote areas have no option but to travel to Perth for treatment. This is placing a burden on the Patient Assisted Travel Scheme (PATS), and where this is insufficient to meet demand, Aboriginal patients and their families may experience homelessness.
- Although Armadale Hospital has established a vascular access clinic within its resources, further progress across the State has not been achieved.
- Progress on the Renal Dialysis Plan has been limited, pending clarification of project responsibilities between the RHN EAG and the RDRG. The capacity of both of these groups to undertake the necessary work is constrained.
- A pilot trial of the renal palliative care pathway across Fremantle, Armadale and Kalgoorlie hospitals has been suspended until at least 2015 due to: staffing shortages. This is a major setback in light of the successful ethics bid for pilot study activity to commence at these hospital sites. Standardisation and State-wide adoption of renal transplant and clinical practice standards related to the care and safety of people with renal disease due to the difficulty with State-wide policy formation.
- Development of the proposed State-wide Renal Vein Preservation Policy over the last year has been minimal due to capacity constraints.
- The Chief Medical Officer is awaiting comment from the Chair of the RDRG on the Quality Improvement indicators for renal therapy, prior to their submission to SHEF for noting. Until this occurs, the indicators cannot be monitored and utilised for quality improvement purposes by the RDRG.

Future Priorities

- Current delays in developing the Renal Dialysis Plan need to be resolved as soon as possible, with input from the RHN clearly defined and agreed.
- One of the RHN Co-leads, met with the Diabetes and Endocrine Network Executive Advisory Group in August 2014. During this meeting interest was expressed in regard to extending the existing data linkage project to also capture the burden of diabetes in WA through a joint application for data from major pathology laboratories in WA. This project is to be scoped in conjunction with the Epidemiology Branch and Data Linkage Branch.
- It is hoped to re-start the Renal Palliative Care Project if resources allow in 2015.

- The further development of standardised policies and protocols across the State remains a priority in the coming year.

Conclusion

The Model was developed in 2007. The health outcomes for people with chronic kidney disease have largely improved for those living in metropolitan areas; however, inequality still exists for those living in rural and remote areas. The WA Renal Dialysis Plan 2015-2025 in conjunction with WACHS Renal Dialysis Plan 2010-2021, should provide a robust strategic direction for WA into the foreseeable future. It is envisaged that significant cost savings to WA Health can be further realised by exploring service provision options outside of the tertiary setting. There is currently no plan to update the Model.

Level of Implementation

Level 3: Substantial implementation

Respiratory Health Network

Asthma

Chronic Lung Conditions

Chronic Obstructive Pulmonary Disease

Cystic Fibrosis

Sleep Disorders

Model of Care:	Asthma Model of Care
Network responsible:	Respiratory Health Network (ResHN)
Endorsed/noted by SHEF:	2008, updated August 2012

Introduction

The Asthma Model of Care is an articulation of best practice care for those at risk of or diagnosed with asthma across the continuum of care. The focus is on optimal pathways of care and management of long-term conditions through self-management and disease and case management. It is aligned with the Chronic Respiratory Disease Clinical Service Improvement Framework 2005. It sits underneath the overarching Chronic Lung Conditions Model of Care and complements other models such as the Chronic Obstructive Pulmonary Disease, Cystic Fibrosis and Sleep Disorders Models of Care. The Asthma Model of Care contains eight recommendations which range from prevention and promotion; early detection and intervention; integration and continuity of care; and self-management. The ResHN is a conduit for partners across public and community health to share information and work collaboratively towards implementing the recommendations of the Model.

The objectives of the Asthma Model of Care are to:

- outline the model of care to facilitate the implementation of the ten asthma standards
- outline current service delivery and report on the implementation of the ten standards for asthma as set out in the Chronic Respiratory Disease Clinical Service Improvement Framework 2005.

Achievements

There have been a number of achievements in the area of smoking cessation including:

- The Framework for the Treatment of Nicotine Addiction released by the ResHN in November 2010 to provide a state wide approach across primary, secondary and tertiary settings to deliver comprehensive and integrated smoking cessation treatment and support services.
- New restrictions outlined by the Tobacco Products Control Amendment Act 2009 (the Amendment Act) commenced on 22 September 2010. The Act prohibits:
 - display of tobacco products, packages and smoking implements at point of sale
 - smoking “between the flags” at a patrolled swimming area on a beach
 - smoking in outdoor eating areas
 - smoking within 10 metres of playground equipment in a public place; and
 - smoking in or on vehicles if someone under 17 years old is in or on the vehicle.

- The Rockingham Kwinana Division of General Practice Living Well Without Smoking Program and the Goldfields Esperance GP Network Butt Out Nicotine Addiction Programs were funded through the Australian Better Health Initiative from May 2008 to December 2010. They achieved approximately 60% abstinence rates at the end of the program. An evaluation report of the program is available at: http://www.healthnetworks.health.wa.gov.au/docs/NATP_Report.pdf.
- The Closing the Gap Tackling Indigenous Smoking project has continued to be funded on a 12 monthly basis.
- As per the Asthma Foundation WA (AFWA) service agreement with WA Health, AFWA provide ongoing support and development in three areas: advocacy, Consumer education and information.
- Workforce education and professional development. Examples of training:
 - Asthma Child and Adolescent Program which trains teachers and support staff from schools and preschools to manage an asthma emergency in a school setting. As a result of this training, 51% of WA schools have received accreditation from the Foundation as Asthma Friendly Schools.
 - Emergency Asthma Management courses
 - Asthma Awareness for Pharmacy Assistants
 - Four day Asthma Educator Courses
 - One day Health Professional Workshops
 - One week Regional Respiratory Training Program
 - Spirometry Courses
- The short acting beta-agonists (reliever) guidelines (SABA Guidelines) for pharmacists have been released in WA.
- There is ongoing collaboration between the RHN Respiratory Health Network and UWA in pharmacy practice research.
- There is a new support group for people living in Northam with long term lung conditions such as COPD with the first meeting held on 28 April 2014. The group is affiliated with Lung Foundation Australia and is called Wheatbelt Wheezers.

In Progress

- UWA is evaluating the implementation of the Asthma Action Plan card and the SABA Guidelines, and their impact on the care of patients with asthma in the community pharmacy setting. The project is due for completion in 2014.

Challenges

- Although a range of education services are available free of charge, uptake of and referral to education services (i.e. those provided by AFWA) remains low and there are limited services in rural and remote areas. Promotion of existing services should be a priority.
- Engagement between the Health Services and community pharmacy needs improvement. This lack of engagement contributes to pharmacists acting in isolation as

primary care practitioners. A two way referral system would be of benefit to patients. This is relevant to the broader area of chronic disease management in WA.

Future Priorities

- Addressing the issue of maternal smoking has been identified as a priority by the ResHN and the Women's and Newborns Health Network.

Conclusion

The Model of Care for Asthma in WA was first developed in 2008 and recently updated in August 2012. There is no urgency to update the Model. The RHN will work in partnerships with key service providers to monitor and implement the Model.

Level of Implementation
Level 2: Partial implementation

Model of Care:	Chronic Lung Conditions
Network responsible:	Respiratory Health Network (ResHN)
Endorsed/noted by SHEF:	2012

Introduction

The ResHN identified the need to facilitate a holistic approach to the delivery of health services to consumers with chronic lung conditions. The commonalities between lung conditions, which can lead to misdiagnosis and co-morbidity, highlight the need to consider and address chronic lung conditions holistically.

The purpose of the Chronic Lung Condition Model of Care is to complement and overarch the more specific respiratory models such as Asthma, Chronic Obstructive Pulmonary Disease and Cystic Fibrosis. Its guiding principles focus on slowing the progression of chronic lung conditions and enabling early intervention across the continuum of care from the well population to end of life. The Model describes the common core service components shared by the respiratory Models of Care (MoCs). It provides a blue print for implementing consumer and care-focussed health services for addressing more than one lung condition and implementing more than one Model.

The Model is closely linked to the WA Chronic Conditions Framework 2011-2016, WA Chronic Conditions Self-Management Strategic Framework 2011-2015 and the WA Primary Health Care Strategy. The Model outlines eight recommendations which range from prevention, early diagnosis, management in accordance with evidence best practice, workforce education and training and support for the development of information communication technology to support people with chronic lung conditions.

Achievements

The Model is a guide for implementing health service delivery components which are common across the condition specific WA Models for chronic lung conditions. Condition specific outcomes are documented in the Implementation Summary Reports for the Models of care for Asthma, Chronic Obstructive Pulmonary Disease and Cystic Fibrosis.

In October 2012, the WA ResHN convened a forum which included representatives across the continuum of care and the community including clinicians, consumers, carers, researchers, educators, policy makers, industry, service delivery/planning organisations and professional organisations.

The forum was successful with a key emerging theme identified as the need for a systematic coordinated approach to service delivery for consumers with chronic lung conditions including: community based services, adoption of a holistic focus, patient centred care, case management, development and use of patient pathways, streamlined and simplified services and improved access to information. These themes were evident in the Model, supporting its credibility as a comprehensive model for chronic lung conditions. Moreover, the forum was viewed positively as a forum to share ideas, discuss and clarify issues face to face across a broad range of stakeholder groups and, network with peers and colleagues.

Conclusion

The Chronic Lung Conditions Model of Care was endorsed in 2012 by SHEF and is a guide for slowing the progression of chronic lung conditions and enabling early intervention across the continuum of care from the well population to end of life. The Model will continue to be used as an overarching framework for the specific respiratory condition in future Models.

Level of Implementation

Level 2: Partial implementation

Model of Care:	Chronic Obstructive Pulmonary Disease (COPD)
Network responsible:	Respiratory Health Network (ResHN)
Endorsed/noted by SHEF:	August 2012

Introduction

The COPD Model of Care is an articulation of best practice care for those at risk of or with diagnosed COPD across the continuum of care. It focuses on optimal pathways of care for the prevention, diagnosis and management of COPD.

The Model builds on the knowledge and capacity of the current services provided to people with COPD and evidence-based best practice as documented in the WA Chronic Respiratory Disease Service Improvement Framework (CSIF) 2005. Five of the seven recommendations align with the COPD standards in the CSIF whilst a further two address the need for development in workforce and information communication technology to enable better multidisciplinary care planning for all patients with COPD.

The Model is also supported by the WA Health Chronic Health Conditions Framework 2011-2016, WA Chronic Conditions Self-Management Strategic Framework 2011-2015 and the WA Health Primary Health Care Strategy. It sits beneath the more generalised Chronic Lung Conditions Model of Care, which describes core service components of the condition-specific Models of Care. Through these frameworks and Models various health service providers, non-governmental organisations and the local community are able to unify their approach towards providing the right care, at the right time, by the right team and at the right place.

Achievements

- The ResHN convened a forum during October 2012. Recommendations from the updated Chronic Lung Conditions Model of Care were endorsed by representatives across the continuum of care in WA.
- Provision of COPD services for patients in WA including:
 - COPD Linkage program
 - Perth North Metro Medicare Local COPD service – they have recently advertised for a second Respiratory Nurse Linkage Co-ordinator which will enable them to run this linkage service from both Osborne Park and Joondalup.

There have been a number of improvements in the area of smoking cessation including:

- The Framework for the Treatment of Nicotine Addiction was released by the ResHN in November 2010 to provide a state wide approach across primary, secondary and tertiary settings to deliver comprehensive and integrated smoking cessation treatment and support services.
- New restrictions outlined by the Tobacco Products Control Amendment Act 2009 (the Amendment Act) commenced on 22 September 2010.

- The Rockingham Kwinana Division of General Practice Living Well Without Smoking Program and the Goldfields Esperance GP Network Butt Out Nicotine Addiction Programs were funded through the Australian Better Health Initiative from May 2008 to December 2010. They achieved approximately 60% abstinence rates at the end of the program. An evaluation report of the program is available at:http://www.healthnetworks.health.wa.gov.au/docs/NATP_Report.pdf.
- The Closing the Gap Tackling Indigenous Smoking project has continued to be funded on a 12 monthly basis.

Pulmonary Rehabilitation Services:

- Rockingham General Hospital commenced a pulmonary rehabilitation program to improve access for individuals with COPD in that area.
- Community Physiotherapy Services (CPS), initially with sub-acute care funding, commenced initial (Phase 2) pulmonary rehabilitation programs in recreational facilities. These programs are now successfully run in Heathridge, Leederville, Beechboro, Rockingham and North Lake for individuals at a low risk of adverse events.
- CPS Phase 3 maintenance Pulmonary Rehabilitation continues to run on multiple sites across the metropolitan area.

Other activities include:

- Fremantle Medicare Local provide free community workshops for people living with COPD, chronic pain, diabetes, heart disease, kidney disease, and arthritis. They provide participants with skills and strategies to help cope with physical and emotional concerns resulting from their conditions.
- There is a new support group for people living in Northam with long term lung conditions such as COPD with the first meeting held on 28 April 2014. The group is affiliated with Lung Foundation Australia and is called Wheatbelt Wheezers.
- The Health Navigator program commenced in September 2013 and provides services to people with COPD, diabetes and chronic heart disease for patients in the Wheatbelt and Central Great Southern regions, with the potential to spread to further areas across the state in the future. The program helps people navigate the health system and links them up with the most appropriate service locally. It also encourages them to self-manage their condition using the Flinders University Self-management process. Health Navigator also has an Electronic Shared record that allows all health professions involved in their care to contribute and communicate via the shared record. The program is also engaging specialist services to provide clinics in person and via videoconference.
- Access to private spirometry services in the south metropolitan area is now available.
- Carepoint is a service targeting 1,500 clients with chronic conditions who have attended SCGH 3 to 4 times in the past 2 years. This will include patients with COPD. Nurses and physiotherapists will work with patients and their GPs creating care plans and navigating the health system to access services over a 3 year period.

- Silver Chain received funding from the Commonwealth Department of Health and Ageing to conduct a randomised controlled trial of telehealth monitoring with Silver Chain clients who had a diagnosis of COPD. The results of this trial were very positive with reductions in health service use for the telehealth group resulting in substantial cost savings over the six month period.
- The Respiratory Health Network developed the “Would home oxygen help me?” brochure which can be downloaded from http://www.healthnetworks.health.wa.gov.au/docs/Home_Oxygen_Brochure.pdf.
- The Operational Directive “Provision of Domiciliary Oxygen - All Public Health Services In Western Australia” (OD0221/09) was released and includes a prescription form. http://www.health.wa.gov.au/circularsnew/circular.cfm?Circ_ID=12547
- Work in the area of Advance Health Directives (AHD) has progressed with the Acts Amendment (Consent to Medical Treatment) Act 2008 which provides a legislative basis for AHD and increased certainty for health professionals in the difficult area of end of life care.

In Progress

- Armadale Community Rehabilitation Centre plan to commence pulmonary rehabilitation.
- The pulmonary rehabilitation program at FSH is scheduled to commence February 2015 and will include 6 clinic types.

Challenges

- There is still a need for ongoing efforts to ensure services link in with more specific chronic disease management programs.
- Despite the commencement of community based pulmonary rehabilitation programs by CPS in metropolitan areas, there has been little increase in access to hospital-based pulmonary rehabilitation programs for higher risk groups or in rural areas. Programs have commenced at Rockingham and are planned for Armadale; however there is still no formal pulmonary rehabilitation at Joondalup Health Campus or Osborne Park Hospital and the future provision at Midland Public Hospital is unclear. With the opening of FSH, pulmonary rehabilitation services at FHHS will be reduced.
- The expanded South Metropolitan Health Service COPD linkage service was discontinued in mid-2014 when funding ran out. It was only established at Rockingham Hospital. The Armadale equivalent could not be accommodated at the hospital and nurse and physiotherapist clinics held at a local community centre.
- The COPD linkage service in Midland and Bentley will cease in December 2014. This program has been highly successful in reducing emergency department attendance and readmissions for people with COPD.
- Funding for all WA Health (including CPS) pulmonary rehabilitation services is now provided under ABF. The requirement for this funding is referral from a public health service. This means that patients of GPs and private physicians may be unable to access these services. To date there are no privately run pulmonary rehabilitation programs in WA. CPS has put on additional groups in some areas but other areas are experiencing a drop in referrals due to fragmentation of pathways with service reconfiguration and impacts of allied health staffing shortages.

- The fragmentation of respiratory care services causes difficulty for people trying to navigate the system as there is no simple way to find out what is available in each area and what the criteria for accessing those services are.
- Utilisation of the COPD Action Plan is ad hoc due to limited promotion and some practicality issues. Introduction of technology such as digital media may impact their use in the future.

Future Priorities

- Provision of hospital-based pulmonary rehabilitation in the North Metropolitan Health Service – particularly Joondalup Health Campus and continuation the services provided by Swan Districts Hospital at the new Midland Public Hospital.
- Provision of Pulmonary Rehabilitation in the South Metropolitan Health Service is currently being changed with the opening of FSH. The model of hospital and community-based service providing access to all patients should be considered in the process. Filling the void left by ceasing COPD Linkage in Midland and Bentley is also a priority.
- Community Physiotherapy Services under Public Health Ambulatory Care now provides pulmonary rehabilitation under ABF funding. There are no 'private' pulmonary rehabilitation programs. This limits GPs and private physicians referring patients to these programs. This should be considered in future funding models to ensure equal access to all patients with COPD to these services.

Conclusion

The Model of Care for COPD was first published in 2008 and updated in 2012 to reflect current evidence and best practice. There is currently no need to further update the Model besides minor amendments to outdated programs or policies.

While progress has been made with regard to implementation of recommendations in the Model, inter-sectorial partnerships still need to be fostered in order to realise the benefits of community based practice and care.

Level of Implementation

Level 2: Partial implementation

Model of Care:	WA Cystic Fibrosis Model of Care
Network responsible:	Respiratory Health Network (RHN)
Endorsed/noted by SHEF:	September 2013

Introduction

The WA Cystic Fibrosis Model of Care describes the WA Cystic Fibrosis Care Service (WACFCS); a model of service delivery driven by partnerships between the consumer and their family/carer, paediatric and adult tertiary hospital services and other specialist and community-based services.

The aim of the WACFCS is to provide lifetime care for the person with CF across the continuum of care; addressing the biological and psychosocial needs of people with CF and their families/carers including end of life and palliation services. The WACFCS will provide leadership and the WACFCS Service Director will facilitate the paediatric PMH and adult SCGH based services and, the large component of community based service delivery.

The Model includes 8 key recommendations which promote best practice across the continuum of care for the person living with CF in WA. It is supported by the WA Health Chronic Health Conditions Framework 2011-2016, WA Chronic Conditions Self-Management Strategic Framework 2011-2015 and the WA Primary Health Care Strategy. It sits underneath the overarching Chronic Lung Conditions Model of Care and complements other models such as the Chronic Obstructive Pulmonary Disease and Asthma Models of Care.

Achievements

- Improved referral pathways between paediatric, adult and community services through Cystic Fibrosis WA (CFWA)
 - CFWA transition program: tour of adult hospital for young adult and parents facilitated by CFWA community nurse, backpack or bag with: cookbook, 4 information booklets, toiletries and food and information on CFWA.
 - Adolescent and young adult support program: \$200 subsidy to assist with driving lessons, \$50 subsidy for adolescents in hospital to assist with food & travel, exercise and physiotherapy loan equipment.
 - CFWA multi-disciplinary team comprising of: community nurse, nurse educator, physiotherapist, social worker/counsellor, recreation/health promotions officer, lay educator and 9 home care workers. There are eight metropolitan and one regional team.
 - The CFWA services team liaises regularly with hospital specialists and conducts regular education sessions to regional schools, allied health and more recently General Practitioners.
 - Regular meetings and handover discussions occur between hospital staff and CFWA to facilitate patient care referrals to and from hospitals. CFWA home care workers provide Hospital-in-the-Home support upon referral.
 - Improved support services, community education and support for people living with CF

- Improved workforce allocation for adult and paediatric services at SCGH and PMH.
- Additional workforce and service changes have occurred at SCGH including the establishment of segregated clinics, CF nurse transition to CF Nurse Practitioner, establishment of joint clinics with a specialist in CF-related diabetes and use of telehealth consultants for country patients.
- Telehealth is being delivered to all adult CF patients in country and rural areas. The adult clinic offers three-monthly CF telehealth clinics to all patients.
- CFWA provide home care workers support to assist with airway clearance, exercise programs and occasional respite and home duties. Service staff are available to provide one to one support as needed throughout the lifespan, this can include: counselling, life coaching, physiotherapy advice/modelling, education, exercise and physiotherapy loan equipment, education seminars, connection to other parents and general information/advice.
- Developed 3 new brochures for CF Fit, which is a comprehensive exercise program:
 - A guide for Personal Trainers
 - Exercise and CF – A guide for people with CF
 - My exercise record
- Targeted programs include:
 - A newly diagnosed welcome pack is provided to families when first diagnosed which contains an information booklet about CF, a quilt and baby items. Support is offered when families become members of CFWA.
 - Starting school or education sessions throughout a child's schooling life both metro and regional. These sessions can also involve problem solving issues such taking enzymes and toileting.
 - Parent support through events such as the ladies dinner, men's day out, parents retreat.
 - Rozee Kids magazine 8-13 yrs: Discusses issues embarrassing to some children (e.g. mucus, smelly bowel movements) the magazine has also engaged children in topics of their choosing.
 - Sibling camp 8-17 years: An annual camp to build resilience, self-esteem and connection amongst siblings of children with CF.
 - Adolescent/young adult: New magazine in 2014 for 13-18 years to address teenage issues. Counselling and education provided by other service staff.
 - Transplant support program – annual dinner for transplant patients, hospital survival pack following transplant and cleaning support pre transplant.
 - Celebration of Life and bereavement – annual ceremony where all members of the CF community are invited and bereavement support is provided.
- Research funding and activity: Australian Respiratory Early Surveillance Team for Cystic Fibrosis and five PhD 'top-up' grants worth \$10,000 each.

In Progress

- Project scoping to allow people with CF to access medication closer to home either through postage or via their community pharmacy.
- National Health and Medical Research Council grant application for trialling the implementation of the WACFCS.
- As part of the CFWA contract with WA Health, CFWA continues to develop CF capacity in the areas of comprehensive home care and regional respiratory support.
- Priority project areas for CFWA:
 - Development of a support network for adult siblings and parents of adult children
 - Development of a health coaching program targeting adolescents and young adults in self-management strategies
 - Completion of CF Smart national website and brochures
 - A guide to cystic fibrosis for Early childhood educators
 - A guide to cystic fibrosis for Primary school teachers
 - A guide to cystic fibrosis for High school teachers

Challenges

- Promotion of the Model requires unity in the areas of data collection and provision, information communication technology, research, workforce development and, consumer and family/carer involvement towards delivery of the WACFCS for the person with CF across the lifespan and continuum of care.

Conclusion

A review of the WA Cystic Fibrosis Model of Care is not required at this time. Services for people with CF in WA are currently provided by the Adult CF Centre at SCGH and the Paediatric CF Centre at PMH (which will be transitioning to the PCH. The ResHN will work in partnerships with key service providers to monitor and implement the CF MoC.

Level of Implementation

Level 2: Partial implementation

Model of Care:	Sleep Disorders
Network responsible:	Respiratory Health Network
Endorsed/noted by SHEF:	April 2010

Introduction

The field of sleep medicine is broad and the spectrum of sleep disorders includes sleep related breathing disorders (such as obstructive sleep apnoea, sleep related hypoventilation and central sleep apnoea syndromes), insomnia hypersomnias of central origin, circadian rhythm disorders, parasomnias and sleep related movement disorders.

The Sleep Disorder Model of Care focuses on respiratory sleep disorders, which are widely prevalent and provide a useful basis on which to consider care of sleep disorders generally. Sleep disorders are also significant in people with Chronic Obstructive Pulmonary Disease (COPD) and thus the COPD and Sleep Disorders Models of Care complement one another.

The nine recommendations set out the key areas and priorities to build capacity and ensure a sustainable service model to meet the growing demand for diagnostic and treatment services for sleep disorders. They address clinical practice, the proposed governance model, investment in infrastructure, workforce, education/professional development and research.

Achievements

Sleep medicine is a relatively recent internal medicine specialty addressing very common and pervasive medical problems. As with all other Australian states, WA services started from a tertiary hospital base and now involve a mix of public sector and private sector providers, both adult and paediatric.

The Model has provided a framework for:

- incorporation of sleep services into the North Metropolitan Health Service (NMHS) Respiratory Service Plan (under-development)
- closer WA Health involvement and responsibility for sleep services at SCGH
- development of a facility at FSH which will accommodate a second tertiary training centre in WA
- development of a framework for General Hospital sleep services
- impetus to develop rural remote services, both through telehealth and visiting specialists through a mixture of private and public providers
- collaboration between public and private providers through sharing resources, cross referral of patients and state-wide schemes to provide equipment to treat sleep disorders to financially disadvantaged and/or disabled patients
- facilitated transfer of paediatric patients to adult services at age-appropriate times
- a network of services readily accessible for primary care providers.

In Progress

- The FSH sleep laboratory is built and is currently configured for adults. It is to be commissioned in 2015.
- Consolidation of tertiary services to the FSH for adult services.
- Increased training opportunities for private sleep physicians.
- Expansion of services to outer metro areas by utilising telehealth services.

Challenges

- Progression of e-health initiatives will enable enhanced referral pathways, inclusive of e-health initiatives to expand and maintain services for people in rural and remote areas.
- Progression of plans to commission services at FSH.
- Creation of a training position at PMH to allow training capacities there to be utilised.
- Development at general hospitals – in the first instance by ensuring the existing service at Swan District Hospital (SDH) is continued and enhanced in the transfer to Midland Public Hospital. This is at risk as currently there is no provision for state investment in sleep services in the MPH Contract. The current service provided at SDH increases access to services for local residents and provides appropriate care closer to home.

Conclusion

The Sleep Disorders Model of Care was developed at an opportune time in the evolution of sleep medicine services in WA. It has served to formalise tertiary services; provide guidance to the current and future development of secondary services and services to rural and remote sectors; strengthen links between public and private sectors; and enhance cooperation between paediatric and adult services.

Level of Implementation

Level 2: Partial implementation

Table 4: Summary of Frameworks

	Network	Model of Care	Date endorsed/ noted by SHEF	Level of Implementation
1	Child and Youth Health Network	Paediatric Chronic Diseases Transition Framework	Nov -2009	2
2	Child and Youth Health Network	Our Children Our Future: A Framework for Child and Youth Health Services in Western Australia 2008-2012	Aug 2009	N/A
3	Health Strategy and Networks	Chronic Conditions Self-Management Strategic Framework 2011-2015	Dec -2011	3
4	Health Strategy and Networks	Chronic Health Conditions Framework	May -2012	1
5	Injury and Trauma Health Network	WA Non-Major Trauma Framework	Mar -2010	4
6	Primary Care Health Network	WA Primary Health Care Strategy	Dec -2011	2
7	Respiratory Health Network	Framework for the Treatment of Nicotine Addiction	Nov -2010	2
8	Womens and Newborns Health Network	Improving Maternity Services: Working Together Across Western Australia - A Policy Framework	Aug- 2007	3
9	Womens and Newborns Health Network	Framework for the Care of Neonates in Western Australia	Mar -2009	3

Child and Youth Health Network

Paediatric Chronic Diseases Transition Framework

Our Children Our Future: A Framework for Child and Youth Health Services in Western Australia 2008-2012

Framework:	Paediatric Chronic Diseases Transition Framework
Network responsible:	Child and Youth Health Network
Endorsed/noted by SHEF:	November 2009

Introduction

In 2009 the WA Child and Youth Health Network (CYHN) published the Paediatric Chronic Disease Transition Framework (the Framework).

Developed by consumers, carers, clinicians, health service providers, planners and policy makers, the Framework details best practice processes along the care continuum. Healthcare transition is a three phased process and an integral part of the long term management plan for the young person's medical treatment which should employ strategies to empower the individual, including:

- being planned, accessible, coordinated and continuous
- being developmentally and psychologically appropriate
- being patient-centred
- recognising the shifting role of the parent/s or carer/s and health care professionals
- reducing the likelihood of adverse health outcomes; and
- meeting the expectations of the young person, their family and the transition team.

Five key principles that underpin the implementation of effective transition services and support systems and six objectives are outlined in the Framework as well as a range of strategies and recommendations to direct focus towards effective transition.

Objectives of the Transition Framework	Guiding Principles for Good Transition
<ol style="list-style-type: none"> 1. Improve transition planning and preparation. 2. Tailor transition and appropriately address individual adolescent developmental issues. 3. Improve communication, coordination and collaboration between service providers. 4. Improve education and training of health care professionals around transitional care. 5. Improve patient self-management through development of resource information. 6. Determine, measure and evaluate outcomes. 	<ol style="list-style-type: none"> 1. Planned and coordinated care. 2. Readiness for transition. 3. Ownership of transition by the young people. 4. Shared responsibility by all involved in the transition. 5. Accessibility and availability of services.

Since publication, steps have been taken by the CYHN to facilitate system-wide implementation of the Framework which also aligns with the following WA Health Initiatives:

- Paediatric Implementation Plan (Child and Adolescent Health Service Clinical Services Plan).
- Hospital Infrastructure projects including PCH, FSH and other secondary sites involving paediatric and adult services).
- Rare Diseases Plan, developed by Office of Population Health Genomics (Public Health and Clinical Services Division).
- Update of Our Children Our Future Framework and consultation work undertaken by the Commissioner for Children and Young People.
- Priority projects for various Health Networks (Chronic Disease Health Networks, Child and Youth Health Network, Disability Health Network) including some condition specific transition projects.

Implementation of the Framework through a coordinated system-wide approach also aligns with all four pillars of WA Health's Strategic Intent 2010-2015 and National Safety and Quality Health Standards:

- Standard 1 - Governance for Safety and Quality in Health Service Organisations; and
- Standard 2 – Partnering with Consumers.

Achievements

Co-coordinated by the CYHN and Disability Health Network (DHN), two workshops were held in 2013 including:

1. A stakeholder scoping workshop with carers, consumers, and paediatric health professionals to define the scope for the implementation of the Framework.
2. An adult health sector professionals workshop to inform the scoping and planning phases to develop an implementation plan for the Framework.

Key outcomes from both workshops are grouped into the following three themes:

- Engagement across health service sectors, community support groups, consumers and carers.
- Capacity building, education and training
- Coordination and communication
- Stakeholder consensus to identify characteristics of successful transition and some agreed direction as to how to enable this reform.

Whilst the strategies listed under each of the Framework objectives have not been written with measurable outcomes, a number of condition and/or service specific achievements have been noted which are in line with the guiding principles, objectives and strategies outlined in the Framework. For example:

- Cystic Fibrosis WA facilitated Transition Program including tours of adult hospitals and provision of resources for young adults and their families.
- Improved workforce allocation for adult and paediatric services across PMH and SCGH tertiary sites.

- Championing of an adolescent health specialty within PMH.
- Transition service mapping undertaken by CAHS Clinical Planning Unit.

Consultation with CAHS Clinical Planning and Reform indicate the following relevant achievements, most of which align with the Framework and/or outcomes of the two 2013 Forums:

- An internal review of PMH's current processes for transitioning adolescent patients to adult services at PMH was conducted from late August to October 2013 through consultation primarily with senior nursing staff.
- The recommendations from the review included:
 - Organisational guideline/policy for transition of adolescents to adult services to be developed for PMH which include preparation components, documentation and communication with adult services.
 - Development of a standardised checklist/transition progress plan to be kept in the patient's progress notes and reviewed by clinicians and the patient at outpatient appointments.
 - Implementation of dedicated coordinators, based in adult centres, to assist teams with the transition of young people with complex needs.
 - Further investigation into methods for facilitating social components of transition, i.e. social media, youth workers, buddy programs.
 - Development of tools and resources for patients and their families to assist in the preparation prior to transitioning to adult services.
 - Investigate the viability of establishing a dedicated area for adolescents and young adults in the outpatient area at the PCH to facilitate transition preparation for patients.
 - Engagement of adult clinicians through the Queen Elizabeth Medical Centre (QEIMC) Clinical Synergies Steering Group to improve communication and transition processes for specialties that are yet to formalise a transition pathway to adult services.
 - Development of clinical leadership to facilitate improved transition processes.
 - Executive endorsement from across the whole of WA Health to prioritise action to improve adolescent transition to contribute towards the achievement of the National Safety and Quality Health Standards – Standard 1: Governance for Safety and Quality in Health Service Organisations and Standard 2: Partnering with Consumers.
- This review was a Health Science Practicum student project and was resourced for 12 weeks. As there have been a number of competing priorities for the Clinical Planning and Reform budget this year, the recommendations have not progressed significantly. The 2014 National Lead Clinicians Network Forum held in WA met to discuss issues associated with transfer of care from youth to adult services however content only focussed on one narrow component of transition, being transfer of care. No outcomes report has been released from the event facilitator. Event participants included many key stakeholders across adult, paediatric, public, private and primary care settings and several Health Network Leads also presented on the day. Whilst the program also incorporated 'condition' specific streams, implementation of the Framework needs to focus on integrated solutions across services.

In Progress

Consultation with CAHS Clinical Planning and Reform indicate the following work is currently in progress:

- The dedicated outpatient area in the PCH is being progressed with the Clinical Commissioning Team, however no announcement/decision has been made as of yet. Recommendations from consumers who participated in the 2013 CYHN/Disability Health Network forums indicated dedicated adolescent areas should be integrated into adult sites.
- The QEIIIMC Clinical Synergies Steering Group has been established to provide oversight and strategic direction for shared or co-operative clinical services and/or workforce which better integrate and streamline care for children, adolescents and adults at the QEIIIMC site. Some of the functions and responsibilities of this group relating to the adolescent services and transition to adult services are:
 - Establish an effective patient flow model for the management of adolescents and young adults between PCH and SCGH on the QEII site.
 - Develop and progress a model of care for effective transition of adolescents and young adults from paediatric to adult services.
- Other recommendations arising from the CAHS service mapping project which were in progress however are now on hold due to resource constraints are, the standardisation of patient and family preparation for transition to adult services (including the policy and a standardised checklist) and the implementation of dedicated coordinators in Health Services.

Challenges

Key challenges in moving a system-wide implementation of the Framework forward include:

- Still unclear consensus/defined direction for a system wide approach to implementation across all health service settings.
- Lack of leadership and ownership across adult health sectors/services.
- Strategies to engage and empower primary care sectors and GPs to focus on holistic care pathways as part of the strategies to drive change through empowerment of consumers.
- Limited capacity of stakeholders to contribute in the current environment of major health service reconfiguration and change.
- Identification of incentives and opportunities for adult sector professionals to engage in transition planning early on, including meeting consumers and their carers in paediatric settings.
- Need for financial incentives in ABF/M environment.
- Limitations/barriers to implementing ICT opportunities for information sharing and data linkage across sectors.
- Cultural change and understanding that transition is a phased process across all levels of care (not just transfer of care within the tertiary setting).
- Care coordination roles are difficult to fund in a resource (FTE) tight context across health services.

Consultation with CAHS Clinical Planning and Reform identify the following challenges:

- Transition for consumers with multiple co-morbidities requiring input/care from several specialty departments continues to be fragmented and uncoordinated. Some consumers transitioning will transfer to adult services for particular specialities before other specialities which results in the person visiting both paediatric and adult settings in the interim. This is mainly due to no central coordination point/role/position to facilitate transition of these patients (which is seen in NSW and Victoria).

Future priorities

Future directions of Health Strategy and Networks are shifting towards a more collaborative, across networks focus for projects. Developing an Implementation Plan for the Framework requires leadership from the 'Conditions' Networks in partnership with/ input from several Population Health Networks (i.e. Child and Youth, Disability, Mental Health and Primary Care Health Networks) and other service planners across the system. Priority areas for this to be achieved include:

- Development of clear governance structure for implementation across the WA Health Services with buy in at the executive level and across primary care sectors.
- Empowerment and facilitation of young people's experiences to drive the change and meet their needs across all three phases of transition.
- Incentives for engagement and participation of adult health service providers.

Conclusion

With survivorship of paediatrics and young people increasing significantly, the WA Health system must support this growth in service demand across the system to ensure smooth transition and reduce preventable hospital admissions/presentations to EDs through better management of young people transitioning to adult health services.

Level of Implementation
Level 2: Partial implementation

Framework:	Our Children Our Future: A Framework for Child and Youth Health Services in Western Australia 2008-2012
Network responsible:	Child and Youth Health Network
Endorsed/noted by SHEF:	August 2009

Introduction

Our Children Our Future – A Framework for Child and Youth Health Services in Western Australia 2008-2012' (The Framework) was developed in 2008 to guide stakeholder efforts to achieve improvements in the health and wellbeing of children and youth in WA across the continuum of care. It superseded but was informed by a draft WA Youth Health Strategy developed in 2007.

The Framework highlights the issues affecting children and youth and, proposes strategies to improve the physical and mental health, development, and wellbeing of all Western Australian children and young people.

The Framework identifies five key objectives for improving the health and wellbeing of Western Australia's children and young people:

- Improve the health and wellbeing of all children and youth through perinatal and early childhood intervention and prevention strategies which address the determinants of health
- Improve child and youth health and wellbeing through the early diagnosis, acute care and ongoing treatment of current key health issues
- Improve child and youth health and wellbeing by encouraging self-management and addressing key health-related and risk-taking behaviours
- Improve the health and wellbeing of specific population groups through improved access and cultural sensitivity
- Improve child and youth health and wellbeing by improving child and youth health service provision.

Achievements

In 2013 the Child and Youth Health Network consulted stakeholders including clinicians, planners and designers, policy makers, funders and providers, professionals and managers, other government and non-government health service providers and consumers regarding the ongoing relevance and applicability of the framework to child and youth health services in WA. Feedback was positive and described the Framework as:

- A frequently used reference tool by a number of health service providers across disciplines
- A current guiding policy document consistent with the priority areas in child health
- A well written document with good rigour and integrity

The Commissioner for Children and Young People's 2014 Position Statement on youth health a recent and significant policy document in WA, references the Framework extensively.

In Progress

- As the 2013 review process confirmed the Framework was still current and applicable as a policy guiding document, no further changes are required at present.

Challenges

This document is a framework written to guide the development of policy and programs in child health. Its impact should be assessed not the level to which it has been implemented. A 2014 policy developed by the Commissioner for Children and Young People referred to a significant section of the Framework.

There is also in parallel to the Framework a draft National Child and Youth Strategic Framework for Health. The Child and Adolescent Health Service are hosting a consultation opportunity for this National Framework which identifies key strategic priorities in child and youth health in Australia, in October 2014. The draft strategy also draws together a range of policy initiatives that seek to improve the health and wellbeing of children and youth and also aims to support a coordinated holistic and multi-agency approach to targeting key child and youth health priority areas.

The development of this national framework has implications for the current state based approach to child and youth health.

Future Priorities

- While the Guiding Principles and objectives of the Framework remain current and priority areas remain consistent, an update would reflect a contemporary change in focus to include a more youth centred approach.
- If a decision is made to update the Framework, the following should be considered:
 - Including a health and wellbeing context that is broader than WA Health
 - More detail on the role of pre-pregnancy and pregnancy lifestyle in the child/young person's life
 - Further detail on mental health, sexual health and obesity.
 - Transition to adult health services

Conclusion

- In summary the Framework continues to guide how policy and programs are developed and delivered, providing alignment across the child and youth sector. It establishes the guiding principles on which child health policy and planning in WA should be based and these remain current.

Health Strategy and Networks

Chronic Conditions Self-Management Strategic Framework

Chronic Health Conditions Framework

Framework:	Chronic Conditions Self-Management Strategic Framework
Network responsible:	Health Strategy and Networks
Endorsed/noted by SHEF:	December 2011

Introduction

The WA Chronic Conditions Self-Management Strategic Framework 2011–2015 (the Framework) outlines self-management principles relevant to all long term health conditions. It is targeted at all health service providers and planners in WA and provides a focus for:

- supporting system and practice changes to incorporate self-management into the core
- principles of chronic conditions management
- targeting training for health care professionals to assist consumers with chronic conditions to actively self-manage their health; and
- developing and implementing chronic conditions self-management programs and services for consumers with adaptations as required for people from culturally and linguistically diverse populations.

Consistent with the WA Chronic Health Conditions Framework 2011–2016, the specific chronic conditions that are given priority for implementation include:

- cardiovascular disease (coronary heart disease, heart failure and stroke)
- type 2 diabetes mellitus
- chronic renal disease
- chronic musculoskeletal conditions (osteoporosis, osteoarthritis and rheumatoid arthritis)
- chronic respiratory disease (chronic obstructive pulmonary disease and asthma).

The Framework outlines strategic short term (2 year) and long term (4 year) goals across five essential areas required for self-management philosophy to be adopted and embedded into health care practices: culture, awareness, services, knowledge and skills and tools and resources (products). Change in these areas will promote appropriate allocation of resources, improved referral pathways, best practice programs and services and capacity building across the care continuum.

The Strategic Framework supports the following strategies and frameworks:

- National Chronic Disease Strategy 2004
- WA Chronic Health Conditions Framework 2011- 2016
- WA Primary Health Care Strategy
- WA Health Strategic Intent 2010-2015

Achievements

The application of the Framework has gained traction across the health system through formation of the Chronic Conditions Self-Management Reference Group (CCSM RG) and Steering Committee which was established in June 2012.

Health Services and service providers contracted to WA Health, report on key performance indicators which align with the Framework and utilise key drivers for change: partnerships, continuous improvement, building capacity and equity and access. WA Health currently contracts Diabetes WA, Fremantle Medicare Local and the Health Services NMHS, SMHS and WACHS to embed self-management principles into core practice and drive system-wide change. A snapshot of their achievements and activity are summarised, below:

- Health Services
 - Partnering activity between Health Services, Diabetes WA, Medicare Locals, Curtin University and other organisations.
 - Embedding of self-management into core practice (NMHS, SMHS, WACHS)
 - NMHS working collaboratively to develop online resources for consumers and corporate use through, HealthPoint including cross-platform utilisation such as YouTube.
 - NMHS in conjunction with *ConnectGroups* – development of 2014 Directory of Support and Services for people living with Chronic Health Conditions
 - SMHS is collaborating with the Training Centre for Subacute Care WA to implement area wide training that includes self-management support. One of the aims of this collaboration will be to optimise self-management support in the delivery of community rehabilitation.
 - SMHS is using the SMHS Community Rehabilitation Service Guidelines to promote self-management as a core principle relevant to self-management support.
 - SMHS has initiated a partnership with the Warren Jones Institute to design and evaluate the Community Rehabilitation service – which includes self-management as a core principle.
 - WACHS currently deliver the WACHS Chronic Condition Service Coordination (CCSC) and Chronic Condition Self-Management (CCSM) programs. Through these programs the following activity has occurred:
 - Development of plans addressing the objectives of the Framework
 - Poster on the CCSC outcomes of clinical redesign at Broome hospital was presented at the WA Health Conference 2012. Consumer engagement activity in WACHS-SW was a finalist in the Partnering with Consumers category at the WA Health Awards 2013.
 - Overseeing of formative research, developing and disseminating a DVD consumer resource ‘Self-Managing your long term health condition’ across agencies within WA metropolitan and country WA, Australia and overseas with positive feedback received.

- Diabetes WA
 - Currently delivering the evidence based Living With Diabetes (LWD) and the Diabetes Education and Self-Management for Ongoing and Newly Diagnosed (DESMOND) programs. DESMOND is being trialled in Aboriginal communities and LWD is facilitated in Cantonese and Mandarin languages.
 - Engaged in capacity building the health workforce by training others in the DESMOND and LWD programs, which now have reach across the state.
- Medicare Locals support the principles of self-management through
 - Delivery of a suite of evidence based generic self-management programs across the WA greater metropolitan area.
 - Engaged in capacity building by training peers and/or service providers in the delivery of generic self-management programs (Stanford Chronic Disease Self-Management Program, Stanford Chronic Pain Self-Management Program, Living Improvements for Everyone Program).
 - Metropolitan Healthy Lifestyle Programs which provide practical support for people at risk of developing chronic disease, or those newly diagnosed with chronic disease to make informed lifestyle choices and healthy behaviour change within the Perth metropolitan area. This includes integrating healthcare across the continuum by networking with community local government and non-government initiatives such as local health and fitness services, and partnering with other organisations to provide resources which promote self-management such as Diabetes WA and The Australian Guide to Healthy Eating.

The CCSM RG has drafted a Self-Management Assessment Guide and Program Criteria to help support organisations to evaluate the effectiveness of their programs in supporting self-management in practice. The Self-Management Assessment Guide aims to provide resources for evaluating change across three broad settings – the organisation, practice and, consumer and carer. The Program criteria outlines a set of standards to guide providers in the development, delivery and evaluation of CCSM programs in WA. A final draft is in progress which will be sent for broader review prior to endorsement.

Challenges

- Rationalisation of health expenditure across the health system is causing uncertainty across funding, administration and implementation of state-based CCSM activities eg WA CCSM Communications Strategy, CCSM training required for Health Services Learning and Development Departments, WA CCSM networking event and CCSM web maintenance.
- Fostering, enabling and implementing change management philosophy in the context of other competing priority strategic reforms (ABF/ABM, Safety and Quality, clinical services redesign and workforce implications).
- There is a need for a comprehensive state-wide communication strategy to increase awareness of self-management and increase utilisation of self-management behaviours and support strategies to guide branding, marketing and promotion.
- Ongoing workforce shortages in key clinical areas, including diabetes education, and in more remote areas of country WA.

- Harnessing regional capacity and attention with considerable clinical and planning focus on day-to-day activity and other quality improvement initiatives.
- Limited capacity in key partner agencies and stakeholders to support CCSM reform and initiatives.
- The National review of Medicare Locals, currently contracted to provide services, and the uncertainty regarding the formation of the Primary Health Networks and the role they will have in commissioning primary care services moving forward.

Future Priorities

- Track and upload CCSM consumer web content, images and access options for HealthyWA website.
- Track and upload CCSM corporate content to WA Health Corporate website.
- Develop a Communication Strategy for CCSM in conjunction with the Communications Directorate.
- Develop an evaluation survey to determine the success of CCSM within WA.
- Continue embedding CCSM support across WA.

Conclusion

The WA Chronic Conditions Self-Management Strategic Framework 2011–2015 is a strategic framework which enables the philosophy of self-management to be adopted and practised by all organisations who deliver care in WA.

WA Health has gained traction in this area and has achieved success:

- promoting self-management principles into core business
- providing resources centrally across WA Health for consumers and health providers
- raising the awareness and practice of self-management across the health services; and
- extending into primary care and non-government organisational practice.

While a considerable amount of work still needs to be completed to achieve the goals of the Framework, it should be acknowledged that large system transformation takes time and adoption of the Framework is still very much at the infancy of its development in WA. Its adoption is moreover challenged in the wake of many other system reform initiatives currently underway.

Level of Implementation

Level 3: Substantial implementation

Framework:	Chronic Health Conditions Framework
Network responsible:	Health Strategy and Networks
Endorsed/noted by SHEF:	December 2011

Introduction

Chronic conditions are permanent conditions that occur across the lifespan that can result in functional impairment or residual disability. A major cost and a profound economic burden to individuals, families, health systems and societies worldwide, cost savings can be realised through investing in interventions to arrest the burden of chronic conditions.

The WA Chronic Health Conditions Framework 2011–2016 (the Framework) is an overarching guide to implement health service delivery components that are common across the condition specific models of care for chronic health conditions, and a guide to optimally manage consumers living with one or more chronic health condition.

The Framework is targeted at all organisations tasked with planning and implementing service delivery for consumers of all ages with chronic health conditions in WA. These and other key stakeholders will inform, through consultation, how the Framework will be implemented.

The Framework is linked to specific areas in the health sector and other sectors, in particular the:

- WA Health Promotion Strategic Framework 2012–2016
- WA Primary Health Care Strategy 2011
- WA Chronic Conditions Self-Management Strategic Framework 2011–2015
- Hospital sector by engaging with health services to develop strategies for the Framework's implementation in line with the WA Health Clinical Services Framework
- 2010–2020 and Activity Based Funding and Management approach
- Rural and remote health by engaging with country health services to develop strategies for the Framework's implementation, in alignment with their primary health care, service delivery, and workforce development policies
- Aboriginal and CALD groups as priority populations for the Framework
- Social determinants of health through working with partner organisations such as local government, the aged care sector, Office of Multicultural Interests, Department of Housing, Department of Education, Disability Services Commission and other sectors to plan and integrate relevant services to support managing chronic conditions and health more broadly in the community. Partnership with non-health sectors reinforces a holistic approach to health care.

Seven priority areas and broad strategies for each priority are outlined in the Framework. These were identified from a review of condition-specific models of care and key national and state strategies to meet the impact of chronic conditions on the health system and community. The priorities focus on reducing disparities in access to services and health status between metropolitan and rural consumers, and improving the access to health services and health status for Aboriginal people and people from CaLD communities.

Two recommendations are stated in the Framework to foster implementation of the policy:

1. Engage with health service providers and key stakeholder groups, especially within primary care and rural areas, through a consultation process to develop an implementation plan for the Framework.
2. Establish a Chronic Health Conditions Network to complement existing condition specific networks and drive the implementation plan in partnership with key service providers and planners (e.g. metropolitan and country health services, non-government organisations, primary care organisations).

Achievements

As at October 2014 the Framework recommendations have not been implemented. Arguably however, they are indirectly addressed through activities of the various WA Health Networks. This, pragmatic approach to address the priority areas and recommendations of the Framework is realised through the specific model of care reports – for specific examples, refer to the individual reports.

In Progress

Various activities are underway to address the priority areas in the Framework. Refer to the individual condition specific model of care reports.

Challenges

The Framework describes the formation of an implementation plan (recommendation 1) and Chronic Health Conditions Network (recommendation 2). These activities relate to statewide reform in the context of chronic health conditions including, but not limited to:

- developing key performance indicators for service providers
- determining funding and resource requirements
- developing and managing purchasing strategies
- building workforce capacity.

Actioning the recommendations are largely dependent on the cooperation and collaboration across government, non-government health sectors and other sectors in WA. In light of health reform initiatives currently underway at the State and Commonwealth level, the affirmation of the recommendations is indeed challenging and implementation of the recommendations perhaps unrealistic in light of changes to the governance structure of WA Health since the Framework was written. Below are a few examples of the barriers averting the implementation of the recommendations:

- legislative reform activity
- implementation of the ABF/M model
- rationalisation of health resources across the state
- FSH commissioning and redistribution of health workforce across the state
- remodelling of the primary care interface across the state.

Conclusion

This Framework for chronic health conditions in WA was developed in 2011. The information it discloses is still relevant to the WA context. It does not require significant revision at this time.

While the Framework's recommendations have not been literally translated into an implementation plan and establishment of a Chronic Health Conditions Network, work across the various WA Health Networks indirectly demonstrates action in this area. This is an important consideration when interpreting the overall level of implementation of the Framework.

Level of Implementation

Level 1: Little/no progress

Injury and Trauma Health Network

WA Non-Major Trauma Framework

Framework:	WA Non-Major Trauma Framework
Network responsible:	Injury and Trauma Health Network
Endorsed/noted by SHEF:	July 2010

Introduction

The WA Non-Major Trauma Framework (the Framework), developed collaboratively by the Injury and Trauma Health Network (ITHN), seeks to provide a definition of non-major trauma, describing the key elements and concepts related to service delivery.

The Framework aims to guide the development of local strategies to address key objectives in the management of non-major trauma in WA, including a co-ordinated and integrated approach, reducing the burden of injury through prevention and decentralisation of minor and moderate injury and trauma services.

Implementation of this strategic framework involves the development in partnership of care pathways and guidelines that define the delivery of non-major injury and trauma care in WA.

Achievements

Many of the priorities and strategies to reduce the burden of disease are implemented:

- Statewide Injury Prevention Framework - The procurement process conducted by the Chronic Disease Prevention Directorate (injury) for injury prevention in WA was informed through extensive consultation that culminated in a whole of sector summit and an injury prevention framework.
- Successful First Responder Training Programs, a recommendation of the NMTF, have been developed and implemented by St John Ambulance. This training has increased the capacity for life support in multiple recreational areas across metropolitan WA.
- The Model of Care for Burn Injury has been developed based on the principles of the NMTF It is a widely used and referenced Model that is almost fully implemented
- Partnerships between WA Health, WorkCover, the Drug and Alcohol Office and injury prevention non-government organisations have been developed to address substance abuse issues in a co-ordinated way
- Protocols and care guidelines:
 - are in place and integrated system-wide for burn injury.
 - will be developed for soft tissue injury, ear, nose and throat and eye injury as non-major trauma will be included in the new Trauma Systems and Services Plan 2021 (TSS).
 - Acticoat® guidelines have been recommended by WoundsWest from the Burn Injury Model of Care.

Best use of available workforce

- Including injury prevention in the NMTF has opened up the opportunity for the tertiary sector workforce to gain knowledge and become involved in injury prevention.
- First Responder Training creates a link between dial 000, the ambulance service and local communities, increasing workforce capacity.
- The Burn Injury Model of Care uses the triangle of care approach as a triage tool to assess the level of care needed.

In Progress

- Development of a new statewide Trauma Systems and Services (TSS) Plan 2021 will provide an additional focus on non-major trauma.
- While the clinically co-ordinated patient transfer system has not yet been implemented in the WACHS, once the emergency telehealth service has been rolled-out to all sites it will provide clinical decision support for practitioners in rural/ remote communities.

Challenges

The strategies described in the NMTF have largely been implemented however the underlying principles require ongoing work to achieve adherence. New strategies will be developed as part of the TSS Plan 2021 particularly with a focus on a coordinated integrated approach.

Future Priorities

- Using the NMTF to guide non-major trauma related issues in the TSS Plan 2021.
- Combining the two into a single TSS Plan 2021 will facilitate a more strategic, population-based focus for both major and non-major trauma.

Conclusion

The NMTF provides an enduring and useful set of guiding principles from which to plan injury prevention activities and trauma systems and services in WA.

Level of Implementation

Level 4 : Full Implementation

Primary Care Health Network

WA Primary Health Care Strategy

Framework:	WA Primary Health Care Strategy
Network responsible:	Primary Care Health Network
Endorsed/noted by SHEF:	December 2011

Introduction

The purpose of the WA Primary Health Care Strategy (the Strategy) is to:

- describe the role of WA Health within primary healthcare in WA.
- provide a policy framework for WA Health to undertake statewide reform initiatives.
- articulate the importance of primary health care partnerships.
- The principles underlying the Strategy are:
 - Partnership with non-state organisations and practitioners
 - Health literacy and self-management, understanding health information to make informed decisions regarding health care
 - Informing system design through research and policy and supported by evidence in accordance with the principles of continuous improvement
 - Awareness of the cultural, demographic and environmental context during planning and delivery of primary health care.
 - Recognition of the key role played by the social determinants of health including where people are born, grow, live, work and age.
 - Importance of consultation and engagement for recognition in meeting the individual and population based needs of clients.

This document is relevant to all stakeholders within both a primary health care and acute care setting and contains essential components for primary care around a person centred approach, focusing on better health status, a multidisciplinary team approach and, it provides a framework for connection across the multiple stakeholders.

Achievements

The WA Primary Care Strategy through the General Practice After-Hours (GPAH) program has focussed on providing greater access to after-hours medical care. In doing so the Strategy has been able to address some of the key components of the WA Health Strategic Intent. This included the pillar of caring for individuals and the community and also caring for those who need it most.

The GPAH program was an election commitment of \$8m over 4 years to improve access to Primary care services, especially in the after-hours period. In 2012/13 and 2013/14, following the release of the Strategy, Health Strategy and Networks provided an additional \$400,000 p.a. contribution to further support after hours GP care specifically looking at areas of most need. The Strategy has been used to inform the future direction of GPAH funding into 2014/15 and in particular in meeting the healthcare needs of those that need it most.

The Strategy has informed the procurement process in helping to shape and purchase primary care services for the homeless and marginalised groups as sections of the population identified as most in need. This has been achieved with the recent signing of a 3 year service agreement with the Perth Mobile GP service provider who will provide a fixed and in reach mobile primary care service to people from disadvantaged and homeless groups.

In Progress

Further opportunities through the WA GPAH program funding and in alignment with the Strategy are looking at enhancing the support to primary care providers. These new initiatives will complement the existing service agreements and include the following services/programs:

- Advanced diabetes care in General practice:
 - Involves professional development opportunities for GPs to manage people with diabetes with the support of an Endocrinologist and diabetes educator. The proposal is a result of collaboration between the Diabetes and Endocrine Health Network and the Primary Care Health Network. The service will initially operate from two selected areas (commencing in the Southern Metropolitan Health Service region and then transitioning to a rural and remote location within the Pilbara region). It is envisaged that if successful, there is significant potential to expand the service further, particularly to the North Metropolitan Health Service region. This would help to improve access to diabetes services across the State, which was found to have a level of variation in a recent review. The management of this and other chronic conditions remains a key focus area for the Strategy going forward.
- Professional development for General Practitioners (GPs) using video vignettes to improve the management of patients with chronic heart failure (CHF).
 - GPs will be provided with six pairs of video vignettes of actor-patients depicting patients with CHF. Continuing medical education points will be allocated for participation in the project. This project will use a simulation based learning approach to enhance health professional knowledge, skills and competency in managing CHF patients in a primary care environment.
- Respiratory –research proposal to the NHMRC on the implications of transforming a chronic disease service delivery model from a strong tertiary focus to an integrated distributed community based model, using the example of Cystic Fibrosis (CF).
 - In line with the strategic aims of the Strategy this proposal will look at enhancing Primary care through enhanced support to General Practice and other primary care providers in managing patients with CF.
 - This proposal also aligns to the Strategy and the Cystic Fibrosis Model of Care and has the capacity to provide standardised best evidence care, closer to where patients live at a reduced cost to the community.

Challenges

The Strategy remains a comprehensive and current document for WA Health and a priority strategy for implementation for the Primary Care Health Network (PCHN) going forward. The

absence of a corresponding comprehensive implementation plan at the time of the development of the original Strategy and uncertainty around the clinical leadership and ownership and roles with respect to the PCHN has meant that progress with implementation has only seen limited opportunities and gains.

Future Priorities

The Primary Care Health Network forum convened in October 2014 attracted various stakeholders and partners across Primary Care to workshop on how to better engage and improve Primary Care within the new environment across WA.

The forum comprised of 140 participant representatives from General Practice, the RACGP, Health Services, Allied Health, AMA, GPs, Non-Government Organisations, Consumer and Carer Advocates and others to discuss Primary Care in WA. The forum provided the PCHN with a greater understanding of the availability and scope of primary care services, and their linkage into the tertiary and General/Specialist Hospitals

The PCHN EAG will utilise the workshop feedback to identify some of the key challenges and priority areas moving forward including but not limited to:

- Ways to partner with the PHNs, to provide a seamless transition of care for consumers between primary care and the hospital sector.
- Facilitating the delivery of quality health care including supporting the implementation of Commonwealth and State Health reforms.
- Supporting the strategic direction for WA Health into the future by addressing critical areas of Demand Management, Service Integration, Communication and System Financing and Performance.
- Identifying issues and key themes to inform the development of a state-wide implementation plan for the Strategy.

The PCHN will use the forum outcomes to consider the development of an implementation plan to support the Strategy in the 2014/15 financial year.

Conclusion

As indicated the WA Primary Care Strategy at the time of completion was lacking a comprehensive and robust implementation plan through the PCHN. The PCHN will consider as part of its future work program addressing this gap and will use the Primary Care forum outcomes as an ideal opportunity to engage with the broader sector on the future priorities and issues for primary care in WA.

With the appointment of the two new Clinical Leads and a revised Executive Advisory Group structure there is a renewed focus on the implementation of the Strategy.

Level of Implementation
Level 2: Partial implementation

Respiratory Health Network

Framework for the Treatment of Nicotine Addiction

Framework:	Framework for the Treatment of Nicotine Addiction
Network responsible:	Respiratory Health Network
Endorsed/noted by SHEF:	November 2010

Introduction

The Framework for the Treatment of Nicotine Addiction acts as a guide for a statewide approach across primary, secondary and tertiary health service provider settings to deliver comprehensive and integrated smoking cessation treatment and support services.

The Framework supports secondary and tertiary prevention recommendations of the Health Networks chronic disease Models of Care, including chronic obstructive pulmonary disease, diabetes, heart failure, chronic kidney disease and other cardiovascular, renal and respiratory illness.

The Framework seeks to reduce the prevalence of smoking and smoking related harm through the identification, assessment and treatment of nicotine addiction. It addresses:

- Early identification and assessment of smoking and smoking related harm and illness
- Delivery of evidence based smoking cessation methods and products
- Utilising consistent pathways and treatment algorithms to support health service providers
- Recall systems and referral pathways to ensure the provision of timely relapse prevention for all individuals who give up smoking
- Creating supportive environments through policy and legislation that encourage quit attempts and reduce cues to smoke.

Achievements

- Online brief tobacco intervention training is available free of charge at <http://ndri.curtin.edu.au/btftp/>. The National Drug Research Institute was contracted by WA Health to produce the training.
- The Closing the Gap Tackling Indigenous Smoking project has continued to be funded on a 12 monthly basis.
- The Quitline Enhancement Project has continued in WA to help Aboriginal people quit smoking by enhancing awareness, understanding and access to the Quitline

In Progress

- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) smoking cessation guidelines are being reviewed.
- The KEMH smoking cessation guidelines for the reduction of preterm birth are also being reviewed.

Challenges

Ongoing challenges for the treatment of nicotine addiction include:

- Screening tools are not consistently applied across clinical settings.
- Recording smoking status and other smoking related information is ad hoc and does not provide prompts for further identification, assessment and advice to quit.
- Patients who receive treatment for nicotine addiction whilst in hospital are not routinely referred to appropriate community services on discharge, for ongoing support and management.

Future Priorities

1. Addressing the issue of maternal smoking has been identified as a priority by the Respiratory Health Network and the Women's and Newborns Health Network.

Conclusion

The recommendations and advice outlined in the Framework for the Treatment of Nicotine Addiction remains current. Therefore it should continue to be used as a resource and guide for health professionals who have the opportunity to identify and screen smokers and deliver evidence based smoking cessation support and treatment.

There are currently no plans to revise the Framework; however minor updates to outdated reference documents may be undertaken.

Level of Implementation
Level 2: Partial implementation

Womens and Newborns Health Network

Improving Maternity Services: Working Together Across Western Australia – A Policy Framework

Framework for the Care of Neonates in Western Australia

Framework:	Improving Maternity Services: Working Together Across Western Australia – A Policy Framework
Network responsible:	Womens and Newborns Health Network
Endorsed/noted by SHEF:	August 2007

Introduction

The Improving Maternity Services Framework (Framework) outlines several strategies with the overall goal of maintaining a high standard of maternity care for all women and their babies. There is a particular focus on the following themes:

1. Improving health outcomes for Aboriginal women and babies
2. Improving the health and wellbeing of women and their unborn babies through better
3. preconception and early pregnancy care
4. Improving women's experience of pregnancy
5. Improving women's experience of childbirth
6. Improving the health and development of infants and addressing the needs of new parents
7. Improving safety and accountability in all maternity services
8. Improving the sustainability of the maternity care workforce and promoting clinical leadership and collaboration

The Framework presents models which are known to assist in delivering services that are safe, integrated, effective, and responsive to the individual needs of women and their babies in their community setting. The Framework also reflects the move to increase community based maternity care with greater emphasis on continuity of both care and the carer. Finally, the policy framework has enabled the realignment of services for improved equity and access to maternity services whilst allowing continual improvement of maternity care in WA. The Womens and Newborn Health Network (WNHN) facilitated the implementation of aspects of the policy framework within health services.

Achievements

There has been significant achievements and progress against the seven key goals of the Framework, listed above.

The Health of Aboriginal Women and Babies

The Women and Newborn Health Service (WNHS) at KEMH in collaboration with the Aboriginal Maternity Services Support Unit's (AMSSU) commitment to improve the health outcomes for Aboriginal women and babies is evident in the development of strategic partnerships with the Aboriginal Health Council of WA (AHCWA) and the Child and Community Health, Aboriginal Child Health Project. The AMSSU also worked alongside the WNHS Strong Links program (funded under the Safety and Quality QulP initiative) and continues to collaborate with Moort Bjooldjari Mia (MBM), the NMHS Public Health and Ambulatory Care, Aboriginal Maternity Group Practice. MBM addresses a number of the barriers faced by their client group through the introduction of a model of combined clinical and cultural practice.

The Project has highlighted the need for innovative and collaborative approaches to support the complex needs of disadvantaged women. MBM delivers a community based antenatal and postnatal service in a culturally appropriate manner. Commencing in 2012, the Strong Links and Partnerships Program, developed a sustainable case management model of care and system that was both integrated and collaborative. The program actively engaged Aboriginal women and families in antenatal care, birth, infant health and safety planning whilst linking women to local and specific community support services. The project team developed a model of consultation that has fostered skill development and the capacity of social workers working within KEMH to care for Aboriginal women and their babies. This program was able to demonstrate improved engagement of Aboriginal women with complex factors, improved antenatal attendance, decreased length of hospital stay, increased understanding of cultural issues, improved patient journey for Aboriginal women attending KEMH for antenatal care and delivery and, better support mothers with babies in the Neonatal Intensive Care Unit. Unfortunately this program did not receive further funding and ceased in June 2013.

The AMSSU in collaboration with the WNHS have been working together to provide a culturally safe and supportive environment for Aboriginal women and their families across WA. As part of this KEMH opened a family gathering place in May 2014 named, Moort Mandja Mia, providing a space, creating a culturally safe environment for women and babies in their care and also for their families and wider communities.

Finally WNHN and Community and Adolescent Child Health (CACH) worked together in 2014 to develop a resource for health professionals working in Aboriginal child health to promote the uptake of preventative child health services for Aboriginal children under five years. The Aboriginal Maternal and Child Health Aboriginal Leadership Program, has been successfully completed by the workforce in Aboriginal health at the WNHS and CACH's Aboriginal Health Team. The final workshop was completed in May 2014. The program included the development of an introductory DVD to KEMH outlining its services for Aboriginal women and their families, a No Smoking Campaign for radio and the formation of a Network for maternal, women and child health workers working with Aboriginal families.

Improving Preconception, Pregnancy and Childbirth Experiences

Several key projects have been developed to improve the health and wellbeing of women and their unborn babies through better preconception, early pregnancy care and childbirth.

The Healthy You Healthy Baby App and online resources have been developed in collaboration with Edith Cowan University's (ECU) Child Health Promotion Research Centre. They are the outcome of the *Starting Childhood Obesity Prevention Earlier (SCOPE)* project conducted by ECU's Child Health Promotion Research Centre, with financial support from Healthway and WA Health. Developed in June 2012, The Healthy You Healthy Baby phone app is designed to track women's health and wellbeing during pregnancy and the early stages on being a parent, whilst providing parenting tips until the child is 18 months of age.

In late 2012, the WNHN convened a Refugee and Migrant Women Working Group (RMWWG) to support and inform the development of maternal continuity of care/r models for all women in WA.

To support and understand the specific needs for refugee and migrant women and families accessing maternal care and the services providing this care, workshops were held at three maternal servicing hospitals – KEMH, Armadale Health Service and Osborne Park Hospital. The outcomes from this report will form the basis for the next steps to improving maternity care for this group of women. In addition to this, a multilingual information guide to consumer health information in the areas of womens and newborn health is now provided translating information from English to a range of different languages. This can be found at the following link;

<http://kemh.health.libguides.com/content.php?pid=345272&sid=3222649>

In response to a number of reviews and reports into home births in WA, the WA Health Policy for Publicly Funded Homebirths was developed in 2008, this included guidance for consumers, health professionals and health services. The policy was developed to support low risk women living within thirty minutes of a maternity service to have a homebirth. The policy was developed in consultation with key stakeholders and was recently updated in 2013. Given that annually a proportion of women will choose homebirth, WA Health has a responsibility to ensure that, as far as possible, the health and wellbeing of mother and child are protected. WA Health is working to ensure all midwives, delivering continuity of care for women who are eligible for homebirth, provide safe care in accordance with relevant Australian guidelines and standards.

Clinical guidelines for women requesting immersion in water for pain management during labour and/or birth was developed in 2011 in response to increasing consumer demand in WA for the option to use immersion in water for labour and/or birth. The guideline is intended to ensure the safety, as far as possible, for women choosing the option of immersion in water for labour and/or birth for themselves and their unborn/newborn babies. The Operational Directive was reviewed and updated then endorsed in January 2013.

Increased Support for Newborn Care and Parenting

Significant progress has been made towards improving the health and development of infants and supporting the parenting needs of new parents. This has occurred through the implementation of the Baby Friendly Health Initiative (BFHI) across maternity hospitals within WA Health. The initiative includes a hospital breastfeeding policy and Operational Directive, (initially released July 2009) to encourage, promote and support exclusive breastfeeding in hospitals with maternity facilities. To support this initiative, the Network worked with KEMH Educators to develop a comprehensive suite of tools to assist hospitals to achieve and maintain accreditation; this includes promotional material and e-learning programs for clinical and ancillary staff. Since the development of the BFHI e-learning package a total of 9892 people have completed one of the 4 modules offered.

In 2010, the Having a Baby Website was launched with the aim of providing a centralised source of clear, consistent, reliable and appropriate information about maternity care in WA. In 2013, the Network facilitated an extensive review of the functionality and content of the website. Through a collaborative project with Community Midwifery Western Australia (CMWA now TheBump WA), consumers and maternal health related workers opinions were canvassed through an online survey and eight consumer focus group sessions were held across WA (April – August 2013).

WA Health's web design team will be incorporating the recommendations from this review as they migrate this website to the new healthyWA platform. To complement the Having a Baby website, WNHS developed a consumer website to provide information on the different types of maternity care available in WA and an overview of the services available within each locality. As part of the healthyWA website project, this information has been merged with Having a Baby to allow consumers to access the information in one central website.

The WA Health Safe Infant Sleeping Initiative was released in November 2013 and targets all Western Australian maternity and child health services, and health service providers. The following documents collectively form the WA Health Safe Infant Sleeping Initiative:

- Safe Infant Sleeping Policy and Framework 2013 – Operational Directive
- Safe Infant Sleeping Policy and Framework 2013
- Safe Infant Sleeping Inter-Agency Implementation Plan 2013
- Safe Infant Sleeping Brochure 2013

The new WA Health Safe Infant Sleeping brochure depicts consistent safe infant sleeping messages as well as addresses harm minimisation strategies. The Plan addresses the 23 recommendations of the Ombudsman's Report titled Investigation into ways that State Government departments can prevent or reduce sleep-related infant deaths.

36 members from 21 agencies were involved in the development of these documents clearly demonstrating high levels of engagement, participation and collaboration. In addition, a WA Health Safe Sleeping E-learning Package for health professionals was developed in collaboration with SIDS and Kids WA and launched in August 2012. Over 2400 people have accessed the e-learning package to date.

Improved Safety and Quality of Maternity Services

This Framework acknowledges the important roles of each team member and focuses on how best to use their skills, whilst acknowledging the need to be more flexible and creative in how we deliver services to women in rural and remote areas. The WNHN established the Continuity of Care (CoC) Working Group to provide leadership on the introduction or expansion of CoC Models of Care. Good examples of where this has been implemented include the Family Birth Centre and Next Birth After Caesarean clinic at KEMH and Midwifery Group Practice in Broome, Bunbury (with a home birth component) and KEMH. The option of Waterbirth was introduced in 2010, providing women of appropriate risk with a choice for this option of care

WA Health aims to develop, deliver and provide maternal and newborn services that are safe, integrated, effective, and responsive to the individual needs of women and their babies in their community setting.

In addition to this, WNHS's Statewide Obstetric Support Unit (SOSU) has a primary role to support clinicians delivering obstetric and maternity services throughout the state, to enable them to provide the highest quality service as possible. Collaborative projects included the Rural Maternity Patient Journey Project, undertaken in July 2013. The catalyst for this project, was a desire by SOSU and AMSSU to work together in collaboration with WACHS to better understand maternity patient relocation across regional WA.

The introduction of a statewide policy and clinical guidelines for the use of water during labour and/or birth in WA Hospitals and Health Service, produced by the WNHN in 2009. In 2010 the WA Health maternity service providers responsible for the implementation of the policy and guidelines convened the WA Water Birth Site Coordinators' Implementation Working Group. The objective of the Group was to provide a consistent approach across the state to the implementation of the guidelines, monitor and review compliance, share information and develop strategies to overcome any issues.

Health Strategy and Networks developed an audit tool for labour episode that involved water immersion from April 2010 onwards in WA. This included labour events where water immersion was used for pain relief, birth or both. It also includes instances where the woman intended to use water immersion during labour and/or birth but was unable to, likely due to complications or the inability to meet the inclusion criteria defined in the clinical guidelines.

The audit tool results for April 2010 to March 2011 also provided information about the neonatal outcome of births involving water immersion and consumer feedback. Review of the first years' experience of the water birth implementation program, combined with training evaluation feedback, audit results and advice from water birth attendants, Clinical Leads, implementation working group members and others has led the WNHN to make recommendations to guide the program's future directions.

Promoting Clinical Leadership and Collaboration

Over the last five years the Network has hosted four symposiums; the most recent being in May 2014 with 170 people attending including two international speakers. These symposiums have given those involved in maternal and child health in WA a forum to share information on innovative practices and research. The most recent symposium had a focus of four themes; perinatal mental health, Aboriginal maternal health, safer parenting and models of care.

Implementation of the AMSSU Health Promotion Action Plan is now underway. The valuable input from stakeholders state-wide, assisted the AMSSU to develop the action plan in early 2012 in collaboration with the Western Australian Centre for Health Promotion Research at Curtin University. The plan aims to support maternal and child health service providers to address modifiable maternal and newborn health outcomes. This will involve building the capacity of AMSSU and providers to engage in, and integrate health promotion into current models of antenatal and postnatal care, in order to improve outcomes for Aboriginal mothers, their children and families. One element is the delivery of the Planning, Implementing and Evaluating Health Promotion Interventions Short Courses. The AMSSU has provided funding for Curtin University to deliver these courses, tailored to specifically address maternal and child health issues.

In Progress

Two Models of Care, Model of Palliative Care in the Perinatal Period and, Perinatal and Infant Mental Health Model of Care, are currently being developed to provide a plan for best practice care and services in these areas across WA. The Model of Palliative Care in the Perinatal Period has a holistic approach to care provision during pregnancy, childbirth and the newborn period where the fetus has an identified fetal anomaly or a newborn has an identified life-limiting condition. This Model provides pathways for the referral and entry of the fetus/newborn and their family into a palliative care plan. In addition, the Model will assist health care professionals planning and providing this care, and the wider community of service providers involved.

The Perinatal and Infant Mental Health Model of Care and Service Delivery is being developed to provide a comprehensive approach to optimising perinatal and infant/child mental health services for all Western Australians. The Model describes evidence-based best practice and service delivery across the perinatal and infant/child continuum of care. It addresses prevention through to treatment and management for the before pregnancy, pregnancy, birthing, postnatal and infant periods. Both Models will be presented to the State Health Executive Forum (SHEF) in 2014.

In 2011 the WNHN set up a Continuity of Carer Working Group to progress the establishment of midwifery-led continuity of care models within WA in response to policy reviews. To date WACHS Kimberley and WACHS Bunbury have implemented Midwifery Group Practice Models of Care. Other public hospitals across WA are progressing continuity of care models and the Working Group is currently reviewing the New South Wales Midwifery Continuity of Carer Model Toolkit for adaptation in WA to assist the development and implementation of midwifery continuity of care models. The group has developed a statewide template for midwifery-led group practice which includes consideration of annualised salary and conditions and examples for site specific roster agreements.

Consultation is currently underway to improve the Women's Handheld Pregnancy Record. Until recently there has been no nationally consistent client held pregnancy records in Australia. Effective communication and coordination is essential to achieve continuity of care across service providers and settings. Also consistent record keeping ensures maternity care is well integrated and coordinated and, facilitates the appropriate care for women with complex needs. Key stakeholders have been engaged in a consultation forum to gain feedback whilst the Network has surveyed the wider stakeholder group.

The Clinical Senate of Western Australia held its second meeting for 2014 on 4 July 2014. The topic for debate was 'Empowering the XX Factor-Improving access to women's health services for disadvantaged women'. The challenge to debate this topic came from the executive committee of the Clinical Senate in partnership with the co-leads of the Network. Recommendations from the debate were presented to A/Director General and SHEF by the Co-Executive Sponsors and deputy chair on 25 August 2014. The A/Director General has reported back on the recommendations at the clinical senate debate, 7 November 2014.

Research Activities

The Network has worked closely with the Telethon Kids Institute (TKI) and Research Development Unit (RDU) to help prioritise research undertaken by the Institute. More than 10 projects have been completed, with four projects underway and a further three new projects commencing in 2014

Current projects include a pilot study on minimising gestational weight gain among obese pregnant women. This project builds on a previous research project that was conducted by the Institute, resulting in the development of "Blooming Together" – an evidence-based model of care designed to support women with obesity to achieve a healthy gestational weight gain and reduce obstetric and neonatal complications. The new research will look at piloting the program in its entirety to determine whether the program can be delivered effectively in both a community and tertiary setting and to quantify the program costs in the context of operational efficiency and Activity Based Funding.

Additionally researchers from TKI are looking at the pregnancy journey of Aboriginal women and the challenges they face for example, transport, accommodation, language, cultural differences and access to the services are some of the many challenges identified. Researchers have held focus groups and individual interviews with more than 130 health professionals and over 40 organisations throughout WA. Results are currently being finalised for reporting.

NHMRC awarded funding from 2012-2015, with supplementary funding from Telethon for the Better Health for the Aboriginal Health Workers Study. As part of this study, Aboriginal Health Workers (AHW) were introduced to tertiary care, with background work around defining training requirements. Training for the AHW's was completed in March 2014 and they have since begun their role at KEMH. KEMH is now recruiting and supporting Aboriginal women during pregnancy as part of the study to improve the women's maternal journey.

Challenges

Challenges which have contributed to the failure to implement all of the recommendations of the Framework include lack of service availability to meet the needs of women affected by chronic conditions and lack of infrastructure. Future efforts would require additional funding to provide adequate staffing levels and appropriate infrastructure to continue to implement the

recommendations from the Framework with a focus on enabling more women to experience care closer to their homes.

Future Priorities

1. Increase community based collaboration with continuity care models
2. Focus on increasing a holistic model of healthcare for pregnant women
3. Implementation of the Perinatal and Infant Mental Health Model of Care
4. Further funding to support the continuation of the AMSSU beyond June 2015
5. Further funding to recommence the Strong Links Program through KEMH

Conclusion

There are some components of the Maternity Services Framework that require updating in line with governmental changes and policy and, statistical updates. However the direction of the Framework itself continues to focus on women and their babies and making maternity care safe and more accessible for all women across WA. With a high priority to improve outcomes for Aboriginal women and their babies, the Framework continues to provide guidance to focus on groups within our community where outcomes are poor. This Framework has placed improving outcomes for the Aboriginal community as a first priority. The Framework affords direction around moving away from hospital based, medically focused models of care towards community based primary care services that are easily accessible for women and their families. There are currently no plans for a full revision of the Framework.

Level of Implementation
Level 3: Substantial implementation

Framework:	Framework for the Care of Neonates in Western Australia
Network responsible:	Womens and Newborns Health Network
Endorsed/noted by SHEF:	March 2009

Introduction

The Framework addresses all aspects of care for neonates, including service redesign in the primary, secondary and tertiary setting, workforce training and education, prevention and treatment. The complexity of caring for neonates in collaboration with the increasing number of births in WA led to the development of the statewide services framework and best practice patient pathway for babies. KEMH and PMH are the sole tertiary neonatal units in WA that provide level III care for all and level II care for the majority of infants in the state. There were in total 3,277 admissions to KEMH 2013, compared with 2,987 admissions in 2012, representing a 9.7% increase in activity. Admissions to PMH Neonatal Unit accounted for 21.9%, compared with 23.3% in 2012. Inborn infants continue to account for over 95% admissions to KEMH Neonatal Unit since 2010. The Framework transcribes how, why and what services need to be provided to neonates in WA to ensure high quality and safe care for babies.

Achievements

Improvements Across Secondary/Tertiary Care:

- The WA Neonatal Network was established in 2009 to provide advice on the coordination of neonatal beds and care across WA, support the directorate of neonatology and drive the implementation of recommendations from the Framework. The Network provides a centralised and coordinated leadership role and improves the collaboration with primary, secondary and tertiary neonatal services and care in WA. Under the leadership of the WA Neonatal Network there has been a clear focus on increasing neonatal capacity in the metropolitan and rural areas since 2009. Targets have been reached for KEMH with an increase from 80 to 92/100 beds as needed, additionally the KEMH neonatal unit was refurbished in 2011. PMH Neonatal Intensive Care Unit will increase bed numbers from 25 to 30 beds when moved the new PCH in November 2015. Joondalup Health Campus has increased from 12 to 18 beds and Armadale Hospital will increase from 4 to 6 beds. FSH will meet the target of 18 beds by April 2015. FSH Neonatal Unit will open at 11 beds in December 2014 following the transition from Kaleeya Hospital. The new neonatal unit at Rockingham District Hospital has 4-6 beds. The new Midland Hospital will have 4 neonatal beds and is due to open by November 2015 when Swans District Hospital closes their 2-4 neonatal beds. Midland Hospital will have space to increase to 6 neonatal beds depending on clinical demand and resources. In the regional areas, Broome and Albany hospital services for neonatal care have been upgraded.

- There has been significant improvements in the Neonatal Emergency Transport Service (NETS), which is the retrieval service for newborns in WA. There has been an increase in the availability of ventilated transport, qualified drivers and supervising consultants and fellows. This has resulted in earlier back transport so that babies can stay closer to their home for secondary care. In 2013, 1,020 transports were performed by the service, compared with 899 in 2012, representing 13% increase of total activity. The majority (87%) of referrals were from metropolitan areas (within 100km of Perth) with 132 referrals from Country WA. NETS also performed 9 interstate transports to Melbourne and Brisbane for neonates requiring complex cardiac surgery.
- The Baby Friendly Health Initiative (BFHI) has been promoted across maternity hospitals within WA Health. The initiative includes a hospital breastfeeding policy and Operational Directive (initially released July 2009 and updated in 2014), to encourage, promote and support exclusive breastfeeding in hospitals with maternity facilities. To support this initiative, the Womens and Newborns Health (WNHN) worked with KEMH Educators to develop a comprehensive suite of tools to assist hospitals to achieve and maintain accreditation; this includes promotional materials and e-learning programs for clinical and ancillary staff. The WNHN will continue to promote BFHI throughout 2014/2015.
- KEMH continues to maintain its Perron Rotary Express Milk Bank with 3000 litres of milk being donated by more than 350 women for some 650 pre-term babies so far. In 2013 the PREM Milk Bank dispensed 1,026 litres of donor milk, an increase of 75 litres (or 7.9%) from 2012 volumes. The natural sustenance helps reduce the risk of gastrointestinal infections, provides growth factors for still-developing tissues and supplies special immuno-protective properties, helping to increase the young babies' chances of survival. Perth's PREM Bank has sparked international interest with the model being adopted in QLD, NSW, New Zealand, India and Japan.
- The Neonatal Clinical Care Unit (NCCU) of the Womens and Newborns Health Service (WNHS) acknowledges that they are seen as the centre of excellence that provides a statewide service, including policy advice, clinical guidelines and service coordination. In 2013, the neonatologists at WNHS in collaboration with colleagues at Telethon Kids Institute and the Murdoch Children's Research Institute were recognised/awarded by NHMRC a Centre of Research Excellence (CRE) for five years. The award is built on the premise that the short and long-term outcomes of pre-term babies can be improved by the care they are given in the first weeks of their lives, and by not concentrating on individual systems but by working together and considering the holistic needs of the infant. The award by NHMRC is in recognition of collective research achievements, the potential to contribute to new knowledge, and to translate findings to improve health outcomes. CRE funding (\$2.5million) is for research infrastructure (including funding for coordinators of randomised controlled trials and the preclinical research laboratory, statistical and database support) and support for early career researchers.

Achievements continued

- The high performance of NCCU, WNHS is also evident in mortality data compared against other Australian states and NZ, where mortality rates for the WNHS are significantly better for those less than or equal to 28 weeks of age.
- NCCU, WNHN and the WNHS have developed a number of statewide policies and clinical guidelines for babies in collaboration and consultation with key stakeholders and organisations. These include guidelines on resuscitation and admission to the neonatal intensive care unit, respiratory problems and management, pain assessment and management, thermoregulation, venous and arterial access, sampling and line management, nutrition, breastfeeding, infection screening and management, haematology, metabolic management, NETS, imaging procedures, surgical conditions, cardiac conditions and palliative care. The guidelines they have developed have been used not only for other neonatal wards but also other hospitals to improve their standards of care.

Caring for Those who Need it Most:

- The WNHS at KEMH in collaboration with the WNHN are committed to supporting public health programs for pregnant women that promote healthy diet and avoidance of harmful substance use, to reduce and prevent the incidence of congenital abnormalities. This includes support initiatives to improve antenatal care and both access and attendance for Aboriginal women and medium to high risk women.
- The NHMRC awarded funding from 2012-2015, with supplementary funding from Telethon for the Better Health with Aboriginal Health Workers Study. Aboriginal Health Workers (AHW) were introduced to tertiary care, with background work around defining training requirements. Training for the AHW's was completed in March 2014 and they have since begun their role at the KEMH. KEMH are now recruiting and supporting Aboriginal women during pregnancy as part of the study to improve the women's journey with the aim of ensuring high quality and safe care for babies. WNHS staff are also required to undertake mandatory training in cultural competence.
- At risk women attending KEMH are supported through the use of complex care meetings which involve a multidisciplinary team involved in the women's care.

Outreach:

- Currently there are a range of home visiting programs which focus on decreasing newborns length of stay in hospital and improving the provision of care and support for families in the community following discharge. These programs include the Visiting Midwifery Service (VMS) and Hospital-in-the-Home which is undertaken by PMH. The VMS is available to women attending KEMH and the Family Birth Centre who reside within approximately a 40km radius from the Hospital. Women who live outside this limit can see their GP or local hospital for postnatal support. The midwife will visit women and their babies at home each day until the baby is five days old, or longer if necessary. The community child health nurse will then be available to continue the care at clinic visits.

- The total number of home visiting appointments from KEMH was 1,186 in 2013. Similar midwifery home visiting programs are run through other hospitals such as Osborne Park Hospital and Joondalup Hospital. PMH provides a service called, Hospital-in-the-Home which allows neonates, infants and children whose condition is stable to be nursed at home as an alternative to hospital inpatient care. Nurses who are experienced in caring for children provide home visits to offer nursing care, assessment, advice and support. The total number of outpatient medical appointments at PMH in 2013 was 551. Regional areas, the Rural Health West GP Obstetrics Mentoring Program provides support to GPs to maintain their knowledge and skills in providing care to healthy newborns and recognising early signs of disease. Other outreach programs are provided by teleconference to support GPs and nurses in regional areas to update their skills. In 2013, 10 Telehealth sessions were run with between 40-50 statewide participants in each session. Additionally 100 staff from five regional hospitals participated in stabilisation and management of the sick neonate and neonatal emergency care training.
- In 2013 the NCCU, Neonatal Nursing Education Program provided extensive education for Nurses and Midwives throughout WA. This included a Neonatal Intensive Care Nursing program and a Post Registration Neonatal Level 2 RN program. All programs and study days have been developed to assist Nurses and Midwives in the care of the sick, preterm or surgical neonate. 5 nurses undertook a Masters of Clinical Nursing (Neonatal Intensive Care), 38 attended the Hospital Based Neonatal Level 2 Registered Nurse Certificate Training and 10 internal NCCU study days were run for 141 participants. KEMH also provides an opportunity for Saint John Of God Hospital nursing staff to undertake clinical rotations at the Hospital to develop them in various aspects of neonatal care.

Workforce Development and Training:

- The WA Neonatal Education Program provides education programs for members of the medical and nursing profession in WA. These training and assessment sessions include the credentialing and/or training of health personnel in relationship to the management of neonatal emergencies. In total there were 77 individual teaching sessions presented to 1,391 attendees in 2013. The program has a primary role to support clinicians delivering obstetric and maternity services throughout the state, to enable them to provide the highest quality service as possible. Training programs include the Neonatal Resuscitation Program (NRP) and Statewide WA Neonatal Outreach Training for Multidisciplinary Staff. The NRP trains health professionals from multi-disciplinary backgrounds to effectively manage aspects of emergency resuscitation in neonatal care. 43 NRP courses were run in 2013 for 668 multidisciplinary staff. As part of this, the Statewide Resuscitation and Stabilisation Program. (S.T.A.B.L.E) is a two day course which provides outreach education for neonatal resuscitation and stabilisation. During 2014 further improvements were made to this course with the first S.T.A.B.L.E course planned for the end of October 2014.

- The NCCU, WNHS also provides educational activities that are accessed by internal and external staff, this is referred to as the Outreach Education Program. This program provides education support to WA Health Services across both metropolitan and regional WA. For Regional areas, the Rural Health West GP Obstetrics Mentoring Program provides support to GPs to maintain their knowledge and skills in providing care to healthy newborns and recognising early signs of disease. Other outreach programs are provided by teleconference to support GPs and nurses in regional areas to update their skills. In 2013, 10 Telehealth sessions were run with between 40-50 statewide participants in each session. Additionally 100 staff from five regional hospitals participated in stabilisation and management of the sick neonate and neonatal emergency care training.
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- There are a range of university programs which support ongoing training and maintenance of clinical neonatal skills the health workforce in WA. These are the Masters of Neonatology and Graduate Diploma of Neonatology available at UWA and Masters of Clinical Nursing at Curtin University.

In Progress

- Two Models of Care, Model of Palliative Care in the Perinatal Period and Perinatal Mental Health Model of Care, are currently being developed to provide a plan for best practice care and services in these areas across WA. The Model of Palliative Care in the Perinatal Period has a holistic approach to care provision during pregnancy, childbirth and the newborn period where the fetus has an identified fetal anomaly or a newborn has an identified life-limiting condition. This Model provides pathways for the referral and entry of the fetus/newborn and their family into a palliative care plan. In addition the Model will assist health care professionals planning and providing this care, and the wider community of service providers involved. The Perinatal and Infant Mental Health Model of Care and Service Delivery is being developed to provide a comprehensive approach to optimising perinatal and infant/child mental health services for all Western Australians. The Model describes evidence-based practice and service delivery across the perinatal and infant/child continuum of care. It addresses prevention through to treatment and management for the before pregnancy, pregnancy, birthing, postnatal and infant periods. Both models will be presented to the State Health Executive Forum (SHEF) in 2014.

- A dedicated NETS website was recently established. The website is a valuable resource to referring health professionals, who will be able to access medical guidelines, as well as pertinent information about the service. It also enables the general public to become more aware of the service, and has the potential to encourage sponsorship/ donations to NETS directly.
- Ronald MacDonald House next to PMH is currently being considered as an option for accommodation that is culturally appropriate and safe for all women and their families. There is also the existing housing at Agnus Walsh House, however this is somewhat limited.

Challenges

- Staff attraction and retention remains an ongoing challenge as part of neonatal care. Difficulties are due to staff requiring maternity leave, regional barriers and movements of staff to FSH. The international doctor recruitment program has shown considerable success however there are still a number of barriers around relocation costs, residency payments and costs/difficulty of the English testing. The need for better recruitment and relocation packages for neonatal staff, particularly in periods of high occupancy needs to be addressed.
- There is a need for a statewide data collection system which creates standardised discharge summaries for all neonatal units across WA. The KEMH data collection system is in need of an upgrade. Opportunity exists with the Integrated health system being implemented at the new PCH. This will likely enable a modern data collection for NICU at PCH and, when resourced, include the NICU at KEMH, FSH and Joondalup Health Campus in the first instance.
- The Hospital-in-the-Home program needs to be expanded to reduce length of stay and provide support and care to the family in the community setting. Limitations are currently related to the need for funding for additional Nurse Practitioners to extend the program.
- There is a need to further increase culturally appropriate and safe accommodation available to women and their families near tertiary neonatal units for pre and post birth.
- There has been no upgrade at Kalgoorlie Hospital.
- There is considerable support across WA for universal neonatal hearing screening for all babies. However, there is a need for better leadership to progress this agenda for universal screening.
- Screening for retinopathy and blindness in line with clinical guidelines is occurring at KEMH. Currently nurses are being trained to use retinal cameras, storing the images and then providing to ophthalmologists. There is a need to train more staff in ophthalmologic screening, however there is no allocated resource for additional positions, training or equipment. There is also a need to engage a broader range of ophthalmologists to review the images and to accept referrals.

Future Priorities

1. Implement neonatal data collection (integrated, audit, discharge summaries) system across WA for all Neonatal Units
2. Develop neonatal and obstetric clinical indicators for all public hospital delivering maternity care in WA.
3. Revision of recruitment and relocation packages for interstate and international Neonatal staff.
4. Increased provision of safe culturally appropriate accommodation near tertiary centres.

Conclusion

There has been significant achievements and progress against the recommendations of the Framework. There are some components of the Framework that require updating in line with governmental changes and policy and statistical updates. However the direction of the Framework is still relevant in that it provides directions to improve the quality and safety of care provided to neonates across WA. The WA Neonatal Network continues to drive improvements across this area. There are currently no plans for a full revision of the Framework.

Level of Implementation

Level 3: Substantial implementation

References

1. WA Department of Health. Results of the Models of Care Survey. A Snapshot of How Models of Care have been Implemented in WA. Perth, Western Australia; 2012.



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