Leading healthcare reform through curriculum change

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Professor of Clinical Pharmacy
Faculty of Pharmacy and Pharmaceutical Science, Monash University
Alfred Health

- The Alfred Hospital
- Caulfield Hospital
- Sandringham Hospital
- Melbourne Sexual Health

The Alfred Medical Research & Education Precinct (AMREP)

- Alfred Health
- Baker IDI Heart & Diabetes Institute
- Deakin University
- Burnet Institute
- Latrobe University
## Clinical Organisation

<table>
<thead>
<tr>
<th>Programme</th>
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<tbody>
<tr>
<td>Cancer &amp; Medical Specialties</td>
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<tr>
<td>Cardiothoracic and Intensive Care</td>
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<tr>
<td>Emergency and Acute Medicine</td>
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<tr>
<td>Pathology</td>
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<td>Pharmacy</td>
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<td>Psychiatry</td>
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<td>Radiology</td>
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<tr>
<td>Rehabilitation, Aged and Community Care</td>
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<td>Surgical Services</td>
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</tbody>
</table>
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Prato 2037
Is this the future of pharmacy?

- Therapeutic decision making will be delegated to pharmacists
- Physicians will relinquish dosing to pharmacists
- Institutional practice will require periodic recertification
- Institutional practice will be composed of multiple tracks
- Hospital accreditation will require clinical pharmacy services in defined areas of practice
- Turf conflicts between nursing and pharmacy will become more intense
- Conflicts between nurse practitioners and clinical pharmacists will increase
- Pharmacist will have the legal prerogative to prescribe
Barriers to advancement?

- Lack of widely agreed-upon philosophy of practice in pharmacy
- Lack of consensus on what the standard of practice ought to be
- Lack of consumer demand for clinical pharmacy services
- Inadequate substantiation of the value of clinical pharmacy services
- Ill-defined priorities in the provision of clinical pharmacy services
- Lack of continuity of pharmaceutical services
- Inadequate systems of rewards
- Limited expectations of other health professionals have of pharmacists
- Failure of pharmacists to remain competent
- Lack of appropriate technical support in pharmacy
- Pharmacy directors are unable to provide effective leadership
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Prato 2037….really!!

Most important thing we ought to be focusing on?

“search for our identity….whatever that is……”
“Abandon curriculum”
“professional identity…who we are……”
“academic minds need some direction…..”
“ditch teaching…..let them play”
“change teaching approach….”
“show excellence…..”
Most important thing we ought to be focusing on?

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Healthcare practitioners with expertise in medication management
Resistance to change in practice setting

Ward based pharmacists

Versus

Unit based pharmacists
Structured Interdisciplinary Bedside Rounds° (SIBR)

**Intern #1:**
- **Orient**
  - Lead team into room
  - Greet patient and family
  - Say names and roles of all team members, starting with RN
- **Review – IDEAS (30 seconds)**
  - Issues, Diagnosis, Evidence
  - Action
  - Sequelae
  - Response to treatment, barriers to progress, EDO, followup, Resuscitation/escalation status
- **Partner (60 seconds)**
  - Ask patient to share any concerns

**Intern #2**

**Nurse:**
- **Partner (<60 seconds)**
  - Review Goal for the Day from whiteboard
  - Extra time for patient or family concerns
- **Express nursing concerns for (<30 seconds)**
  - Vital signs & Pain
  - Intake (fluids or nutrition)
  - Output (urine or bowel)
  - Mental status
  - Mobility
- **Review (<15 seconds)**
  - Quality and Safety Checklist
    - Foley catheter
    - Central Line
    - VTE prophylaxis
    - Pressure ulcers & stage

**PharmD**

**Resident**

**Attending**

**RN**

**Patient**

**SW/TM**

**Complete**
- a. Quality Checklist
- b. New order capture

**Manage SIBR Rounds**
- a. Ensure next bedside RN ready for SIBR team
- b. Performance feedback to SIBR team members

**Rounds Manager**

**Promote teamwork & shared decision making (<30 seconds)**
- Add detail and redirect as needed to stay on time
- Synthesize inputs into Plan for the Day

**Teach as able (20 seconds)**
- Physical findings
- Pathophysiology

1 Jason Stein, Emory
20. Do you think that any of the following barriers to implementing these roles into your job as a pharmacist exist? (Please tick all the statements that you feel apply)

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time constraints</td>
<td>84.0%</td>
<td>21</td>
</tr>
<tr>
<td>Overlapping with other healthcare professional’s job roles</td>
<td>76.0%</td>
<td>19</td>
</tr>
<tr>
<td>Lack of confidence with conducting simple clinical tests on patients</td>
<td>40.0%</td>
<td>10</td>
</tr>
</tbody>
</table>

Other (please specify) 4

answered question 25
skipped question 18
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14. A sense of urgency and a sense of passion
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(but not limited to)

Healthcare practitioners with expertise in medication management
It’s not about the drug
How much should we focus on new medications?

>98% of all medications initiated in acute care hospitals have been on the market for > 5 years.
It’s not about the drug

Professor David Ben-Tovim
Clinical Epidemiology and Redesigning Care, Flinders Medical Centre and Flinders University.
3 Problems and disconnections identified along a patient journey

- Missed opportunity to prevent admissions
  - In the community
- Complex admission process
  - Unnecessary test ordering by junior doctors
  - Limited understanding of diversionary strategies
  - Lack of agreed acceptance criteria for admitting
  - Limited focus on patient-flow management
- Poor handover from ED to ward
  - Miscommunication about bed availability
  - Delays in transport to ward
  - Nurse escorts used for all patients
- ED to inpatient handover
- In the inpatient setting
  - Care delivered in clinical “silos”
  - Inconsistent process of allied health referrals
  - Long length of stay not actively managed
  - Poor visibility of doctors rounds
  - No agreed plan of care
  - Outliers* with longer length of stay

Overall patient flow management and organisation

- Patient in the community
- Patient enters service
- ED to inpatient
- Inpatient to inpatient
- Patient exits service
- Patient in the community

Clinical and diagnostic support services

- Transfers and transport services

Support services

- Delays in waiting for discharge prescriptions
  - Testing and results reporting priority not aligned with operational urgency
  - Limited after-hours support
  - Information technology ineffective in supporting new processes

Transfers and transport

- Inter-hospital transfers poorly organised
- Backdoor admissions
- Limited visibility of transfers
- Delays in waiting for transport

Discharge

- Inconsistent approaches to discharge planning
  - Delays in waiting for tests
- Delays in waiting for discharge prescriptions and discharge summaries
  - Delays from late referrals to allied health professionals
  - Delayed access to nursing home or rehabilitation facilities
  - Underuse of some services

In the community

- Extremely large number of service providers
- Limited knowledge about services by hospital staff
- Lack of readily available information on services
- Duplication or gaps in services

* Patients admitted to an available bed in a ward that is not the designated ward for their condition.

ED = emergency department.
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• Focusing on innovation and change management
Figure 3: Levels of redesign capability

Level 3: Redesign best practice
Internationally recognised as redesign leaders with a strong track record of operational delivery, academic evaluation, clinical engagement and innovation in redesign. Clear, measurable signs of culture and behavioural changes. Using redesign for improvement across process, quality and patient satisfaction areas.

Level 2: Redesign leaders
Redesign unit in place and strong track record of planning and delivery in redesign. Clear and improving signs of cultural and behavioural change. Performance improving over a range of access efficiency and quality indicators.

Level 1: Health services with high potential for redesign
Evidence of redesign plans and capacity but has not yet undertaken significant redesign work. Mixed levels of clinical or director engagement with redesign projects satisfying either financial or patient/quality-related criteria but not both.

Level 0: Health services with limited redesign capacity
No clear plan of how redesign supports strategic priorities or delivers operational improvement. Little or low capacity for redesign change and little chance of sustainability without capability building, even if individual redesign projects are funded.
1 An agenda for addressing antimicrobial resistance

**SURVEILLANCE**
- **Resistance surveillance**
  - Human isolates (hospital, community)
  - Animal isolates
- **Usage surveillance**
  - Human (hospital, community)
  - Animal health
  - Health care-associated infection
- Disease burden
- Disease outcome

**INTERVENTION**
- **Regulation**
  - Registration
  - Reimbursement
  - Animal use
  - Access to new drugs
- **Infection prevention**
  - Infection control
  - Immunisation
  - Health care epidemiology
- **Education**
  - Stewardship programs
  - Prescribers
  - Consumers
  - Clinical practice guidelines

**RESEARCH**
- Basic science
- Epidemiology
- Social drivers
Balanced adoption of technology
Challenges of Adoption of Technology in the Acute Healthcare Setting

Implementation

– Technological (i.e. system applications)
– Organisational process change (i.e. Workflow redesign)
– Human factors (i.e. user-friendliness)
– Project management (i.e. achieving project milestones)

Challenges of Adoption of Technology in the Acute Healthcare Setting

## Evaluation

<table>
<thead>
<tr>
<th>Dimensions of care</th>
<th>Effect to evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Adherence</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Surveillance</td>
</tr>
<tr>
<td>Safety</td>
<td>Errors</td>
</tr>
<tr>
<td>Access</td>
<td>Time to care</td>
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<tr>
<td></td>
<td>Utilization of care</td>
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<tr>
<td></td>
<td>Time to utilization</td>
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<tr>
<td></td>
<td>Time utilization</td>
</tr>
<tr>
<td></td>
<td>Implementation costs</td>
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Challenges in implementing prescribing: experiences in Victoria

Software functionality
Difference in practices from the US
Required enhancements
Third party vendors
Functional evaluation
Medication datasets
Decision support
Legislative and regulatory issues
Business case
Timelines and political constraints
Sector and clinical expectations
Data
Evaluation
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• Focusing on innovation and change management

• Working together to:

  keep an eye on the big picture
  tackle the tough stuff
  drive rapid spread of knowledge
  facilitate swift implementation
  ensure sustainability of evidence-based solutions.
Health system policy

- Victorian health services policy and funding guidelines 2010-11
- Directions for your health system – Metropolitan Health Strategy
- Rural directions for a stronger healthier Victoria – Update of Rural directions for a better state of health
- Victorian clinical governance policy framework – Enhancing clinical care
- HealthSMART participation policy

Program-specific policy

- Because mental health matters – Victorian Mental Health Reform Strategy 2009-19
- Close the Gap: Indigenous Health Equality Summit – Statement of Intent
- Better Faster Emergency Care – Improving emergency care and access in Victoria’s public hospitals
- Improving care for older people – A policy for Health Services
- Victoria’s intensive care services: Future directions, 2009
- Patient-centred surgery: strategic directions for surgical services in Victoria’s public hospitals, 2010-2015,
- Victorian public hospital specialist clinics - Strategic framework
- Future directions for Victoria’s maternity services

2010-11 State Budget initiatives

Key initiatives of the 2010-11 State Budget will create capacity to meet growing demand for hospital services and include funding to:

- expand inpatient services to treat additional patients and open additional beds in acute, sub acute and critical care services
- meet demand for radiotherapy, chemotherapy, renal dialysis
- invest in mental health services and support mental health service redevelopment and reform
- expand palliative care, post-acute care and provide additional sub acute transition care places
- expand the Hospital Admission Risk program, including the Residential In-Reach Program, and provide additional community rehabilitation services
- treat extra elective surgery patients
- support new health, aged care and community services infrastructure
- increase the health workforce and support health workforce reform
- provide ongoing ambulance services
There are ten Standards in total. The first five standards are:

- **Governance for Safety and Quality in Health Service Organisations**, which provides the framework for Health Service Organisations as they implement safe systems.

- **Healthcare-Associated Infection**, which describes the standard expected to prevent infection of patients within the healthcare system and to manage infections effectively when they occur, to minimise their consequences.

- **Medication Safety**, which describes the standard expected to ensure clinicians prescribe, dispense and administer appropriate and safe medication to informed patients.

- **Patient Identification and Procedure Matching**, which specifies the expected processes for identification of patients and correctly matching their identity with the correct treatment.

- **Clinical Handover**, which describes the requirement for effective clinical communication whenever accountability and responsibility for a patient’s care is transferred.

The five new draft Standards are:

- **Partnering for Consumer Engagement**, which creates a consumer-centred health system by including consumers in the design and delivery of quality health care.

- **Blood and Blood-product Safety**, which sets the standard to ensure that the patients who receive blood and blood products are safe.

- **Prevention and Management of Pressure Ulcers**, which specifies the expected standard to prevent patients developing pressure ulcers and best practice management when pressure ulcers occur.

- **Recognising and Responding to Clinical Deterioration in Acute Health Care**, which describes the systems required by health services responding to patients when their clinical condition deteriorates.

- **Preventing Falls and Harm from Falls**, which describes the standards for reducing the incidence of patient falls in Health Service Organisations.
The Victorian health system in 2022
Responsive to people's needs
Rigorously informed and informative
Pathways that are responsive to people's needs

• Develop a system responsive to peoples needs
• Expanding service, workforce and system capacity
• Increasing system financial sustainability and productivity
• Implementing continuous improvements and innovation
• Increasing accountability and transparency
• Utilising e-health and communication technology
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Independent professional responsibility for health outcomes
Independent professional responsibility for health outcomes

All clinical pharmacists have a clinical outcome indicator

- % drug doses appropriately adjusted for CRRT
- % of patients receiving 1st dose of rivaroxaban within 6-10 hours of surgery *
- % All drugs requiring TDM have documented monitoring plan and/or appropriate management plan *
- % patients prescribed antipsychotics at levels below chlorpromazine equivalents of 1000mg per day *
- % patients prescribed appropriate antiplatelet therapy at discharge following ACS
- Error prone abbreviations % orders (ACHS)
- < 10 days to reach therapeutic INR after warfarin initiation *
- % of PGMU patients with IHD on an antiplatelet *
- % of Vascular patients with PVD on an antiplatelet

MONASH University
Pharmacy and Pharmaceutical Sciences
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