International trends in the funding and financing of primary care: comparing the incomparable?

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Outline

- The changing role of primary care
  - From inputs, process to outcomes
- International trends in primary care performance
- Lessons from national reforms
  - Paying for better performance in primary care
The changing role of primary care
Ageing brings more chronic illness

<table>
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<tr>
<th>% population</th>
<th>2014-15</th>
<th>2054-55</th>
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<tbody>
<tr>
<td>Age 65-84</td>
<td>13%</td>
<td>18%</td>
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<tr>
<td>Age 85 and over</td>
<td>2%</td>
<td>5%</td>
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Notes: the highest number of long-term conditions is restricted at 5.

Source: NATIONAL HEALTH SURVEY 2005

No. of long-term conditions for people aged 50 and above

Source: NATIONAL HEALTH SURVEY 2005
Changing health care needs

Ageing populations and multiple comorbidities

- greater complexities
- greater costs
- greater demands on primary care

Source: Guthrie et al, 2011
Changing needs, changing care

- Preventing chronic disease over the life course?
  - Modifiable risk-factors (e.g. obesity)

- Preventing an escalation of chronic diseases
  - Controlling and managing disease (e.g. keeping patients with diabetes healthy).

- Changing health needs of patients with (multiple) chronic diseases:
  - Multiple health events requiring multidisciplinary care in a variety of setting
  - Patient, rather than disease, centred
  - Management and prevention

- Placing greater focus on the performance of primary care
  - Beyond access, use and costs
International trends in primary care performance
Health expenditure: ambulatory care and offices of physicians – 2011 (or latest year)

Source: OECD Health Statistics, 2014
Trends in ambulatory care expenditure (2003-2011)

Source: OECD Health Statistics, 2014
Remuneration of doctors, ratio to average wage, 2011 (or nearest year)

Growth in the remuneration of GPs and specialists, 2005-2011 (or nearest year)

Average annual growth rate (%, in nominal terms)

Number of doctor consultations per capita, 2011 (or nearest year)

Asthma hospital admission in adults, 2006 and 2011 (or nearest year)

Age-sex standardised rates per 100,000 population

COPD hospital admission in adults, 2006 and 2011 (or nearest year)

Diabetes hospital admission in adults, 2006 and 2011 (or nearest year)

Diabetes admissions per 1 000 patients with diabetes, 2011 (or nearest year)

Number of hospital discharges for diabetes per 1 000 diabetics

Source: OECD, Cardiovascular disease and diabetes: better policies for better health care and outcomes, forthcoming.
Comparing diabetes-related admissions and overall admissions across OECD countries

Source: OECD, Cardiovascular disease and diabetes: better policies for better health care and outcomes, forthcoming.
Summary of international trends

- Australia is in the middle of the OECD ‘pack’: expenditure, use and outcomes
- But measuring primary care performance is complex:
  - Primary care systems encompass a myriad of activities and its functions differ considerably across countries.
  - Hampered by data infrastructure.
  - Differences in provider payment and contractual schemes across countries have an important effect on the scope of data collected.
- Need for continues international R&D agenda to improve comparability
- Benchmarking and monitoring activities of primary care are becoming more common (strongly related to reforms).
Lessons from international reforms
### Policies to improve quality of care in primary care

<table>
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<tr>
<th>Policy type</th>
<th>Examples</th>
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<tr>
<td>Health system inputs (professionals, organisations, technologies)</td>
<td>Accreditation and certification of health care institutes. Professional licensing including GPs and specialised nurses (e.g. diabetes or heart failure) and credentialing. Assessment and control of pharmaceutical products.</td>
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<td>Health system design (allocation of responsibilities)</td>
<td>Accountability requirements at the primary care level. Quality governance structures in recognition of shifting focus of care towards primary care and social care. Quality as part of contracting and patient choice (competition).</td>
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<tr>
<td>Monitoring (standards and information systems)</td>
<td>National standards and guidelines. Regulation on public reporting (including policies and support for registries, use of administrative databases, electronic health records, data sharing across health sectors, and patient surveys). Audit studies. Integrated guidelines on chronic diseases.</td>
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<td>Improvement (incentive structures and programmes)</td>
<td>Financial incentives such as pay for performance, care bundling, patient self-management.</td>
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The Disease Management Program (DMP) in Germany

- **DMP coverage:**
  - Covers six diseases (including diabetes mellitus Type 1 and Type 2)
  - Voluntary participation of patients and physicians
  - Six million patients enrolled
    - Diabetes mellitus Type 2 covering over 3 Million

- **Key aspects:**
  - Physician-based intervention
  - Patient activation and education
  - Treatment according to evidence-based guidelines
  - IT supported documentation, quality assurance
  - Mandatory evaluation of effectiveness and costs
Accreditation of DMP

- Regional health insurances make contracts with physicians
- Federal Social Security Authority examines the contracts in the framework of the accreditation process
- Health insurance funds get a lump sum for operational costs out of the health fund
  (2012: 153 € per person, per year)
Total program-associated costs 2012: 153 € per patient and year

- Doctors fee: 80 €
  - Coordination
  - Documentation

- Doctors fee: 40 €
  - Patient education

- Insurer: 33 €
  - Data management
  - Quality assurance
  - Patient information
  - Management costs

Insurers are reimbursed with the real costs (153 €) from the health fund for all participants in accredited programs. 2012: approx. € 920 mn.
Results from an observational study after 3 years:

Mortality:

- DMP: 11.3%
- Non-DMP: 14.4%

But care needs to be taken in interpreting this result.

Source: Miksch et al 2010, ELSID-Study (Fullerton et al., 2012).
Evaluations show that DMPs have had a positive effect on:

- Physicians’ adherence to guidelines and process measures (annual eye exam increased from 70% to 83% Eichenlaub et al., 2004).
- Patients with blood sugar levels outside the target range fell from 8.5% to 7.9% within a six-month period (Altenhofen et al., 2004).
- Reduction in hospitalisations (Miksch et al., 2010).

Evidence on the programme’s impact on micro and macrovascular complications risk and costs was mixed.

This may be explained by:

- Evaluative complexity (observational data, issues of selection)
- The programme’s impact on process measures whereby DMP participation led to intensified care.
- Short follow-up period for some indicators
  - See: Ullrich et al., 2007; Stock et al, 2010; Stark et al., 2009; Fullerton et al., 2012.
Bundled payments in the Netherlands

- Diabetes program launched in 2007 expanded to COPD, heart failure and CVD risk-factors in 2010.
- Health insurers negotiate a single annual fee with an entity (care group) to provide integrated care.
- Care groups consists of multidisciplinary care providers (can subcontract)
- Care group provides insurer with data on performance indicators for both process and outcomes, for example in diabetes:
  - percentage of patients who had foot examinations in the previous twelve months
  - percentage of patients whose blood sugar levels are under control
  - Rijken et al., 2008
Bundled payments evaluations

- Still early days, but bundled payments have achieved:
  - integration of care sectors
  - transparency of delivered care
  - some indication of cost offsets with fewer hospitalisations

- Challenges around:
  - Lack of competition among care groups
  - Negotiation powers of GPs
  - Development of integrated IT systems
UK: Quality and Outcomes Framework

- Incentives (money) to improve quality
- Up to 30% of practice income linked to performance
- Originally 147 indicators; 76 chronic disease
- Evidence-based and measured by electronic records
- From 2006, practices could achieve a max of 1000 points, in clinical areas including CVD, diabetes, COPD, epilepsy, hypothyroidism, cancer, palliative care, mental health, asthma, dementia, chronic kidney disease, obesity, learning disabilities and smoking.
UK: Quality and Outcomes Framework

- Points awarded in relation to level of achievement (e.g. % with diabetes with blood pressure below X mmHg)
  - 2004/5: £75/point

- Exception reporting

- Total expenditure of around £1 billion per year.
  - Budget over-runs initially £1.1 billion in 2005/06 (£168 million over budget)
UK QOF impact

- Substantial improvements between 2005-2008 on indicators relating to diabetes, hypertension, stroke and heart disease [Eijkenaar et al. 2013]
- Significant improvement in indicators after, but also before, QOF [Steele et al 2010; Calvert et al. 2009]
- Quality of care increased before incentives, but increased faster afterwards for diabetes and asthma [Steele et al 2010]
- Greater improvement 2002 to 2005 than 2005 to 2007 [Calvert et al. 2009]
- No relationship between target achievement and outcomes such as hospital admissions and mortality [Eijkenaar et al 2013]
Broader P4P questions

Many questions remain about P4P schemes:

- the degree of real improvement
- unintended consequences such as shifting away from non-incentive activities
- aspects of design and implementation of the programs that are associated with their effectiveness
- Are they a cost-effective way to achieve quality improvement?
  - Cashin et al 2014
P4P ten criteria for success (Eijkenaar 2011)

- (1) defining performance broadly rather than narrowly;
- (2) attention to patient selection and health-reducing substitution;
- (3) include risk adjustment for outcome and resource use measures;
- (4) involving providers in program design;
- (5) favour group incentives over individual incentives;
- (6) using either rewards or penalties depending on the context;
- (7) more frequent, lower-powered incentives;
- (8) absolute targets preferred over relative targets;
- (9) multiple targets preferred over single targets; and
- (10) permanent element of overall provider payment systems
Key messages:

- Changing needs, changing role of primary care
  - Beyond access and use and towards broader performance measures of quality
- Internationally, Australia’s primary care system sits in the middle
  - Expenditure, output and outcomes
- Take care with international comparisons
  - Primary care outputs and outcomes notoriously difficult to measure (even more so for international comparisons).
  - Outcome indicators related to many other factors, besides performance.
  - Factors such as disease prevalence, coding practices, health sector functions and financing confound performance measures
- Substantive reforms have had a positive impact but many unanswered questions remain
- Data is the great enabler:
  - Advocacy, policy options, evaluation and program design
Disclosure

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