Measuring the “value” of allied health

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Outline

- Value-based care and other approaches
- Allied health services and value-based care
- Implementing value-based care in allied health
- Person-centred care:
  - “Patient-centred care is about treating a person receiving healthcare with dignity and respect and involving them in all decisions about their health. This type of care is also called ‘person-centred care’.”
  - “Being person-centred is about focusing care on the needs of the person rather than the needs of the service.”
    - Royal College of Nursing. United Kingdom
“I want neck pain management 8/10”
Value-based healthcare:

- “the creation and operation of a health system that explicitly prioritizes health outcomes which matter to patients...”
“I want gait rehabilitation 3/10”

“I can walk again”

“A ∧”

“I want neck pain management 8/10”

“My neck pain is gone”
Decision making context

- Value-based healthcare:
  - “the creation and operation of a health system that explicitly prioritizes health outcomes which matter to patients relative to the cost of achieving this outcome”
“I can walk again”

$ $

“My neck pain is gone”

$$$$
Argued benefits of value-based care

- Patients spend less money to achieve better health
- Providers improve efficiency and enhance patient satisfaction
- Payers control costs and reduce risks
- Suppliers align prices with patient outcomes
- Society becomes healthier while reducing overall healthcare spending
  - [https://catalyst.nejm.org/what-is-value-based-healthcare/](https://catalyst.nejm.org/what-is-value-based-healthcare/)
But it is not this simple

YOU KEEP SAYING VALUE-BASED CARE

I DON'T THINK IT MEANS WHAT YOU THINK IT MEANS
Equity in healthcare resource allocation decision making: A systematic review

Haylee Lane, Mitchell Sarkies, Jennifer Martin, Terry Haines

https://doi.org/10.1016/j.socscimed.2016.12.012
Value-based healthcare:

- “the creation and operation of a health system that explicitly prioritizes health outcomes which matter to patients relative to the cost of achieving this outcome”
Multiple perspectives on costs

- Patient
- Health service provider
- Individual staff members
- Society
- Other 3rd party payers

?
<table>
<thead>
<tr>
<th>Third party payer</th>
<th>Patient out of pocket</th>
</tr>
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<tbody>
<tr>
<td>$$$$</td>
<td>$</td>
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</tbody>
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| $                  | $$$$                 |
What about multiple perspectives on benefits?

- **Value-based healthcare:**
  - “the creation and operation of a health system that explicitly prioritizes health outcomes which matter to patients relative to the cost of achieving this outcome”
Two Perspectives of Proxy Reporting of Health-Related Quality of Life Using the Euroqol-5D, An Investigation of Agreement

Steven McPhail, BPhy, † Elaine Beller, BSc, MAppStat, † and Terry Haines, BPhy (Hons), Grad. Cert. Health Econ, PhD* †
(Med Care 2008;46: 1140–1148)

Who’s perspective on benefits

n=150 pairs of proxy-patient assessments

n=130 pairs of proxy-proxy assessments

% with >MCID difference in EQ-5D-3L utility rating

% with >MCID difference in EQ-5D-3L utility rating
SO WHAT I TOLD YOU IS TRUE
FROM A CERTAIN POINT OF VIEW
• Value-based healthcare:
  – “the creation and operation of a health system that explicitly prioritizes health outcomes which matter to patients relative to the cost of achieving this outcome”

To When?

To Whoo?
• Limits of agreement between EQ-5D-3L & VAS admission scores measured at admission, then retrospectively at discharge using a “then test”

• Then-test admission scores were systematically lower indicating patients (at discharge) thought they overestimated their admission scores (at admission)
Value-based care decision making and allied health

- What range of allied health services are offered to those patients
- What techniques are provided during this time
- Which patients get seen by allied health
- What break-down of time is allocated across these disciplines
- How are those techniques performed

All possible patients
Value-based care and allied health
Value-based care and allied health

- All possible patients
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Top down → Bottom up
How do we measure and express our impact on health outcomes which matter to patients?

### Outcomes
- International Classification of Functioning, Disability and Health?
- Health utility?
- Disease-specific health related quality of life?
- Patient-specific functional scale?
- Goal Attainment Scale?
- Patient satisfaction?
- Qualitative comments?

### Methods
- Post treatment question?
- Pre vs post treatment question?
- Then Test?
- Recall bias adjusted Then Test?
- Parallel control?
- Historical control?
- Randomized control?
- Meta-analyses?
- Syntheses of meta-analyses?
- Economic evaluations?
Value-based care and allied health

All possible patients

What range of allied health services are offered to those patients

What techniques are provided during this time

Which patients get seen by allied health

What break-down of time is allocated across these disciplines

How are those techniques performed

Top down

Bottom up
Know your audience and how they make decisions
An example

MSAC Process Framework

Figure 1: High-level MSAC process
Triage (pre-assessment)

- Application developed and submitted by the applicant
- Policy and medical analysis and investigation
- Discussions with applicant (if required)
- Departmental verification of the availability of evidence
- Targeted public consultation

PICO Confirmation

- PICO Confirmation developed by HTA group
- Discussion with applicant, HTA group and Department
- Policy and PASC queries
- Clinical experts

Application Assessment

- Assessment Report (clinical and economic evaluation)
- Critique conducted by HTA group
- Policy and ESC queries

Appraisal

- All relevant information collated and provided to MSAC

Segmentation Inputs

- APR Creation: Conduct segmentation process
- Initial assessment of application’s segmentation criteria and pathway/process
- Establishes an indication of resource and effort required
- Initial Application Progression Record (APR)
- Provided to applicant

APR CHECK-POINT: Re-conduct relevant components of segmentation process

- Reassessment of segmentation criteria and pathway based on additional information (check-point)
- Update of APR
- Provided to relevant department staff and the applicant

APR EVALUATION: Evaluation of final segmentation against initial segmentation

- Evaluation of final segmentation criteria and pathway to initial assessment based on all information (assessing if accurate/sufficient)
- Finalisation and confirmation of APR
- Provided to the applicant
Independent review | chiropractic spinal manipulation of children under 12
Implementing value-based care in allied health

- Regulation
- Governance
- Compliance
Implementing value based care in allied health

Compliance

- Not separate to Governance or Regulation, but as means for promoting their application
- Regulation strategies often need enforcement bodies
National Safety and Quality Health Service (NSQHS) Standards
Implementing value based care in allied health

Regulation

- Rules
- Mandates (must do)
- Restrictions (must not do)
- Standards
- Focus on quality attainment, rather than process used to achieve it
National Safety and Quality Health Service (NSQHS) Standards

The eight NSQHS Standards (second edition) include:

1. Clinical Governance
2. Partnering with Consumers
3. Preventing and Controlling Healthcare-Associated Infection
4. Medication Safety
5. Comprehensive Care
6. Communicating for Safety
7. Blood Management, and
8. Recognising and Responding to Acute Deterioration.
Where are falls prevention resources allocated by hospitals and what do they cost? A cross sectional survey using semi-structured interviews of key informants at six Australian health services

Deb Mitchell a, b, c, Melissa Raymond d, Joanna Jollett e, Melinda Webb-St Mart f, Lee Boyd f, g, Mari Botti h, i, Kate Steen h, Alison Hutchinson a, i, Bernice Redley a, i, Terry Haines i

The estimated percentage of total resource allocation and average cost per bed per year of the top eight falls prevention activities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of total spent</th>
<th>Cost per bed AUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiotherapy treatment aimed at falls prevention</td>
<td>18%</td>
<td>1482</td>
</tr>
<tr>
<td>Continuous patient observers</td>
<td>14%</td>
<td>1160</td>
</tr>
<tr>
<td>Falls assessment/screen by professions other than nursing</td>
<td>12%</td>
<td>1033</td>
</tr>
<tr>
<td>Purchase, locate and respond to falls prevention alarms</td>
<td>11%</td>
<td>909</td>
</tr>
<tr>
<td>Nursing risk screening/assessment</td>
<td>8%</td>
<td>716</td>
</tr>
<tr>
<td>Informal falls prevention patient education</td>
<td>8%</td>
<td>695</td>
</tr>
<tr>
<td>Moving patients to a ward area with higher visibility</td>
<td>6%</td>
<td>541</td>
</tr>
<tr>
<td>Occupational Therapy treatment aimed at falls prevention</td>
<td>4%</td>
<td>362</td>
</tr>
</tbody>
</table>
Total opportunity cost of falls prevention activities across these 6 services in one year

AU $46,478,014

Extrapolation nationally (admissions ratio 834,706 : 10,600,000)

~AU $590,000,000

This nearly exceeds the estimated cost of falls in this setting
Implementing value based care in allied health

**Governance**

- Strategies to “equalise power”
  - Eg. Use of shared-decision making approaches
- Strategies that alter the incentives of providers
  - Financial rewards based on outcomes
  - Without financial incentives, we rely on conscience, pride and reputation as drivers
▪ MEDICAL HOMES
  – Primary, specialty, and acute care are integrated
  – Shared electronic medical record

▪ ACCOUNTABLE CARE ORGANIZATIONS
  – Doctors, hospitals, and other healthcare providers work as a networked team to deliver the best possible coordinated care at the lowest possible cost
  – Each member of the team shares both risk and reward
  – Shared data with 3rd party payers to demonstrate improvements
    ▪ Eg. Reduced hospital admissions

▪ HOSPITAL VALUE-BASED PURCHASING
  – Adjusted payments to hospitals based on quality of care provided
    ▪ Eg. Non-payment for adverse events
We can either wait for value-based care to happen to us…

OR

We can drive redesign of the health care system using value-based care as an argument for change
Example: Allied health clinical education

Governance

- Strategies to “equalise power”
- Eg. Use of shared-decision making approaches
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The “old” block funded model

- Disability support supplier
  - Allied Health Practitioner
  - Total income does not vary based on quantity or quality

- Mediating organization
  - Mediating organization (Disability support organization)

- Disability support

- Consumer of disability support service

- Financial provider
  - Financial provider (Government)

- Rest of society

Impacts of consumer of disability support service on rest of society

Total income does not vary based on quantity or quality
New NDIS model enabled by eCommerce platform

Disability support supplier
Allied Health Practitioner

$ sharing

Mediating organization (eCommerce platform)

Disability support

$ activity-based

Financial provider (National Disability Insurance Scheme)

$ needs based assessment

Society

Total income varies based on quality and quantity

Impacts of consumer of disability support service on society

$ activity-based

$ needs based assessment

$ sharing
…but that is not all, oh no, that is not all…
We can apply similar principles to value-based education.

Supplier of education (Clinical educator) $ Mediating organization (Hospital) $ Mediating organization (University) $ Consumer of education (Student)

- Total income does not vary
- Total income varies based on number of students
- Total income varies based on number of students
Governance

- Strategies to “equalise power”
  - Eg. Use of shared-decision making approaches
  - Strategies that alter the incentives of providers
    - Financial rewards based on outcomes
    - Without financial incentives, we rely on conscience, pride and reputation as drivers
Total income varies based on quality and quantity.
Further reflections

- Value-based care is a philosophy of how health resources should be allocated
  - It has important differences with other philosophies

- It is important for allied health to be able to demonstrate our value to a range of audiences
  - From individual consumers to policy makers and politicians

- Allied health can use value-based care to improve outcomes for society and create opportunities for our professions
  - But we need to be entrepreneurial and ready to break away from historical models
  - We need to take advantages of mechanisms where they already exist