Systems approaches to strengthening health system resilience: Looking again

Prof Steve Thomas
Edward Kennedy Professor of Health Policy and Management

With thanks to
Dr Padraic Fleming, Catherine O’Donoghue and Arianna Almirall-Sanchez
Scope

Work to be done

Health system resilience & the financial crisis
Rethinking health system resilience
Shock cycle
Key challenges
Questions that remain
Systematic Review of Measuring Health Systems Resilience in High Income Countries - Study characteristics (under review)

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Studies</th>
<th>%</th>
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<tbody>
<tr>
<td>Europe</td>
<td>32</td>
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<td>North America</td>
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<td>South America</td>
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Number of studies by year:
- 2000: 0
- 2001: 5
- 2002: 10
- 2003: 15
- 2004: 20
- 2005: 25
- 2006: 30
- 2007: 35
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0
- 2013: 0
- 2014: 0
- 2015: 0
- 2016: 0
- 2017: 0
- 2018: 0
- 2019: 0
- 2020: 31
- 2021: 18

Number of studies by region and event:
- COVID-19: 44
- Economic Crisis: 42
- Natural and Man-Made Disasters: 34
- Pre-COVID Influenza Pandemic: 26
- War/Conflict: 1

Number of studies by resource and event:
- Governance: COVID-19: 20, Economic Crisis: 0, Disasters: 2, Pre-covid pandemic: 0, Conflict: 0
- Finance: COVID-19: 14, Economic Crisis: 0, Disasters: 2, Pre-covid pandemic: 0, Conflict: 0

Trinity College Dublin, The University of Dublin
Round 1: Thinking about Health System Resilience (Traditional)

Shock/Crisis

Absorptive
- protects against resource imbalance

Adaptive
- make system more efficient

Transformative
- rethink system policy, resourcing and delivery of care
Resilience: Absorptive, Adaptive and Transformative

- Reduced Medical Card Coverage
- New Prescription charges
- Increased IP charges
- Higher threshold for drug reimbursement
- Higher ED charges

<table>
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<tr>
<th>Year</th>
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<th>Higher threshold for drug reimbursement</th>
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Graphs showing:
- ED Waiting
- MFP
- Hospital Groups
- Free GP care
- Healthy Ireland
- UHI

- Public health budget
- Staffing
- Inpatient discharges
- Day cases
- ED admissions
- Outpatient attendances
Legacy Issues: In Patient Waiting Lists

![Bar chart showing the evolution of inpatient waiting lists from 2008 to 2017. The chart is color-coded to represent different time periods: 0-3 months, 3 to 6 months, 6 to 12 months, and 12+ months. Each bar represents a specific period, with the segments showing the number of cases by time period.]
Resilient health system are those that are able to manage well each stage of the shock cycle.

Health system resilience is the ability to:
• Prepare for
• Identify
• Manage (absorb, adapt and transform), and
• Recover and learn from Shocks to improve health system performance

Key Strategies by Health System Function

**Governance:** (1) Effective and participatory leadership with strong vision and communication; (2) Coordination of activities across government and key stakeholders; (3) Organisational learning culture that is responsive to crises; (4) Effective information systems and flows; and (5) Surveillance enabling timely detection of shocks and their impact.

**Financing:** (6) Ensuring sufficient monetary resources in the system and flexibility to reallocate and inject extra funds; (7) Ensuring stability of health system funding through countercyclical health financing mechanisms and reserves; (8) Purchasing flexibility and reallocation of funding to meet changing needs; and (9) Comprehensive health coverage.

**Resources:** (10) Appropriate level and distribution of human and physical resources; (11) Ability to increase capacity to cope with a sudden surge in demand; and (12) Motivated and well-supported workforce.

**Service delivery:** (13) Alternative and flexible approaches to deliver care.
But – the Shock Cycle highlights significant challenges!

Appropriate Clustering of Strategies
Preparedness
Shock interaction
Stress testing and Learning
Legacy vs Emergence
Survey of EU Health System Experts, July 2019 – Key Concern

- Epidemiological shocks: 80%
- Environmental shocks: 60%
- Economic shocks: 40%
- Other type of shock (mainly demand-side): 20%
- Other type of shock (mainly supply-side): 20%
- Technological shocks: 20%
- Societal shocks: 20%
- Geopolitical shocks: 20%
- No shock type-specific assessment performed: 0%
The problem of being mis-prepared
Looking for Brexit, found COVID 19

Johnson
COXIT up
More than one shock at a time?

Proposed new Terminology

1 Shock - Misfortune
2 Shocks - Carelessness
3 Shocks - Dublin buses
4 Shocks – “Omnishambles”
Signs of Learning?
Building Legacy

1. Spotlight for action
   - Identifying/magnifying weaknesses
   - Stress test

2. Catalyst/Accelerator/Enabler
   - Disruption
   - Opportunity
Unexpected Emergence

It’s not all whack-a-mole for Central government

• Telemedicine
• Demonstrated resilience and entrepreneurship of HR
• Vaccine development
Questions and Reflections

• Can we be appropriately prepared?

• What does consistent good governance look like?
  • Mistakes made

• How do we build a good legacy and facilitate constructive emergence?

• How do we deal with negative legacy and the problems that persist?
  • Backlog of Care
  • Weltschmerz of health professionals
Thank You

https://www.tcd.ie/medicine/health_policy_management/research/current/restore/