The organization of resilient health and social care following the COVID-19 pandemic

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Introduction

• Presentation of Opinion from the EXPH - Expert Panel on Effective Ways of Investing in Health

• Document available [here](#):

• Members: Jan de Maeseneer (Chair), Pedro Pita Barros, Anna Garcia-Altes (Vice-Chair), Damien Gruson, Dionne Kringos, Lasse Lehtonen, Christos Lionis, Martin McKee, Liubove Murauskiene, Sabina Nuti, Heather-Lynn Rogers, Luigi Siciliani, Dorothea Stahl, Katarzyna Wieczorowska-Tobis, Sergej Zacharov, Jelka Zaletel.
• Mandate: to look beyond the current crisis and consider how health systems can prepare better for future health threats

• Two main questions:
  • What should be a new framework for the organisation of health and social care following the COVID-19 pandemic?
  • What would be a resilience-test for unpredictable high-pressure scenarios?

• We build on existing approaches to resilience of health systems and on “stress” tests from other (non-health) related areas

• (what follows is a personal view of the key elements of the Opinion)
An integrated view of the health system:

<table>
<thead>
<tr>
<th>HEALTH SYSTEM INPUTS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
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</thead>
<tbody>
<tr>
<td>Health workforce</td>
<td>Healthcare services</td>
<td>Health</td>
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<td>Community carers</td>
<td>Social and community care</td>
<td>Well being</td>
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<td>Medical products</td>
<td>Health promotion activities</td>
<td>Financial protection</td>
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<td>Infrastructure (capital, machines)</td>
<td>Access</td>
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<td>Technology, information systems</td>
<td>Quality, safety</td>
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<td>Governance, leadership, health system cooperation</td>
<td>Responsiveness</td>
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<td>Equity</td>
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<td>Efficiency of organisation (reducing waste, cost effectiveness)</td>
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<td>Financing arrangements for individuals, patients and providers</td>
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Resilience of health systems:

• Several definitions, sharing a common set of concerns:
  • Foresight ability
  • Absorb – able to maintain core functions when hit by a shock
  • Adapt – learn from shock and resume operations at optimal level (eventually a new optimal level after the shock)
  • Learn - prepare for future shocks

(definitions can be found in the works of Expert Group on Health System Performance Assessment, European Commission’s Joint Research Centre, Kruk, Myers et al. 2015, ...
The shock of COVID-19

• Short-term response – vulnerable groups of different nature

• Short-term unintended effects from response – non-COVID-19 care harmed, both by decisions of patients (not seeking care) and by diverted resources to COVID-19 (an effect reinforced in the current 3rd wave in several European countries)

• Medium- and long-term – expected pressure on mental health issues
The use of this framework

• Foresight – use of integrated data and AI – identify early, measure and share information

• Be prepared to prepare a response to unplanned events – redundancy and flexibility in the deployment of resources (including intra-European flows) – role of strong primary care systems and COVID-19 illustrate the relevance of this element; resources – both physical resources and human resources (health professionals)

• Adaptation at short notice – examples given by a) redesign of patients’ paths inside organizations, separation of COVID-19 patients from non-COVID-19 patients; b) rise of telemedicine
One important “lesson” on the go

• Vulnerability - those disproportionately exposed to risk and those disproportionately affected by risk

• Several vulnerable groups with different nature:
  • Medically vulnerable
  • Socially marginalized
  • Professions which entail closer proximity to confirmed or suspected COVID-19
  • Mentally / psychologically vulnerable
  • Economically vulnerable

• These groups are not mutually exclusive (a person may fall in more than one type of vulnerability)

• Vulnerability is also affected by virus control measures
Resilience testing of health systems

• Move from definition to “testing” – creating an operational test requires identification of
  • a) what is the shock (stressor)
  • b) what is subject to the shock (the health system or significant part of it)
  • c) what effects does the shock trigger (the response)

• How to build a test:
  • Phase 0: preparation of a shock scenario ( 
  • Phase 1: decisions by relevant agents - mainly qualitative information
  • Phase 2: based on decisions, populate with quantitative data effects from shocks and decisions
  • Phase 3: set scores for key elements
  • Phase 4: learn from test where to improve
**FIVE PHASES OF RESILIENCE TEST IMPLEMENTATION**

**PHASE 0:**
Preparatory Phase
The test owners in the Member States adapt the toolkit to their health system and context.

**PHASE 1:**
Qualitative Data Collection Phase
**STEP 1A:**
Assessment of baseline functioning and relevance of indicators
**STEP 1B:**
Assessment of functioning under Adverse Scenarios

**PHASE 2:**
Quantitative Data Collection Phase
The test owners in the Member States collect supplemental quantitative data and simulate changes to these values under each Adverse Scenario

**PHASE 3:**
Summarization Phase
The test owners and external support staff assist in scoring the indicators. Weights for indicators within a building block are determined. A scorecard is produced.

**PHASE 4:**
Transformation Phase
**STEP 4A:**
Reporting results
**STEP 4B:**
Action planning and implementation

> > > CONTINUOUS EVALUATION OF THE TEST IMPLEMENTATION PROCESS > > >
Recommendations

• Invest in training and resilience of health workforce – not just train more; train for flexibility and team work, including transnational collaborations

• Be prepared for disinformation during unexpected events - identifying and applying strategies to reduce such disinformation, to improve health system and societal response

• Ensure relevant data flows in a timely and organised way for decisions to take place and for equity-robust decision processes (vulnerable groups – who, when and how)

• Strong primary care and mental health systems form the foundation of any emergency and/or preparedness response

• Fully develop and pilot the resilience test toolkit and implementation methodology, including a strategic plan (with national and European elements)

• More generally, facilitate the emergence and continuous operation of learning communities (share results from responses to shocks and from resilience testing)