

Multi-level perspectives on health system resilience

Insights from childhood vaccination delivery system responses to compound crises in Lebanon

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The classical definition of resilience

*"The capacity of a health system to **absorb, adapt or transform** when exposed to a shock...and still retain the same control over its structure and functions"*

Blanchet K, Nam SL, Ramalingam B, Pozo-Martin F. Governance and capacity to manage resilience of health systems: towards a new conceptual framework. *International journal of health policy and management*. 2017;6(8):431

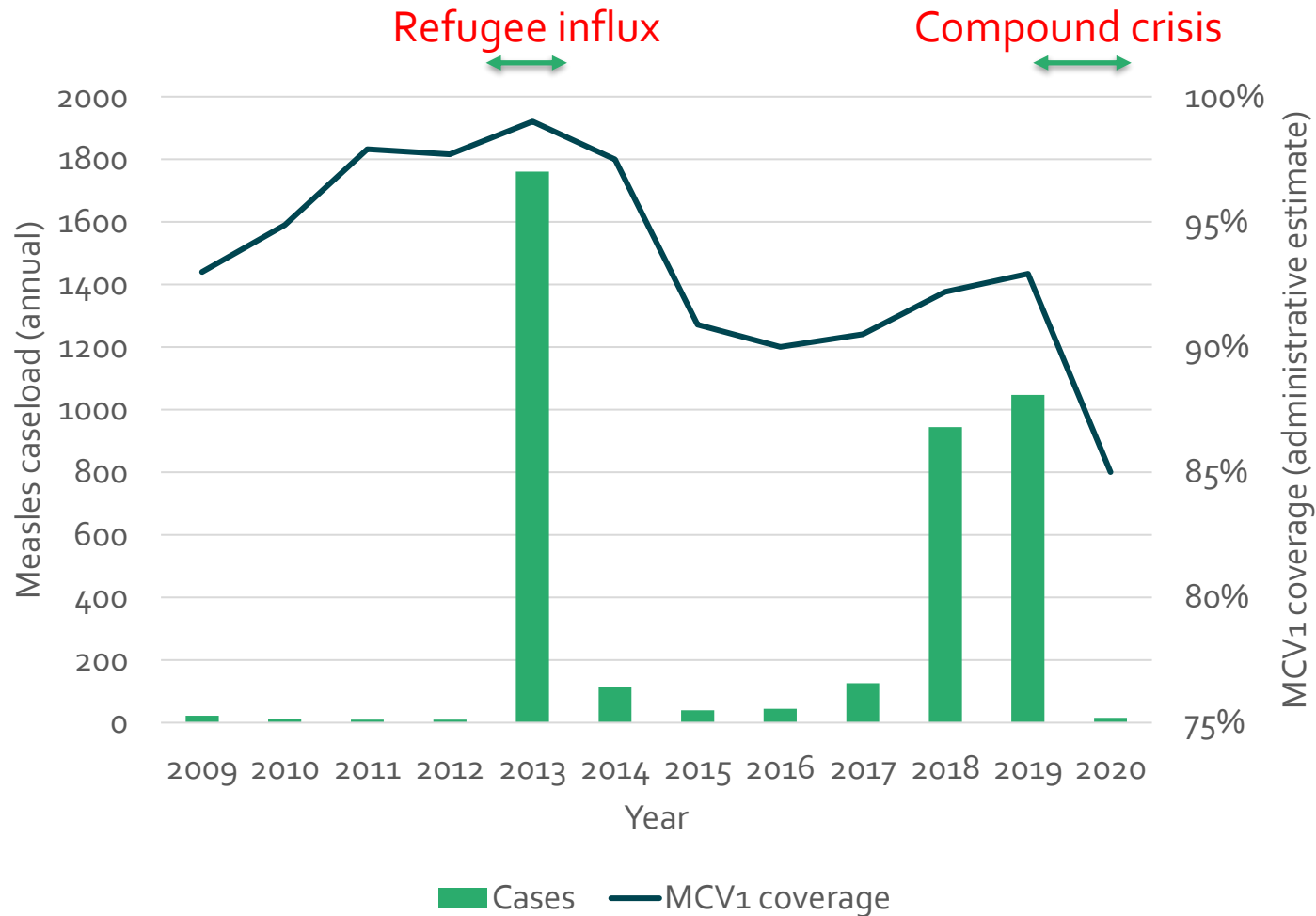
The problem to be addressed

Vaccination coverage may be **disrupted over time** in humanitarian settings, with an attendant risk that the incidence and severity of vaccine-preventable diseases (VPDs) may increase. Maintaining threshold levels of population vaccination coverage is a **major policy and service delivery challenge**

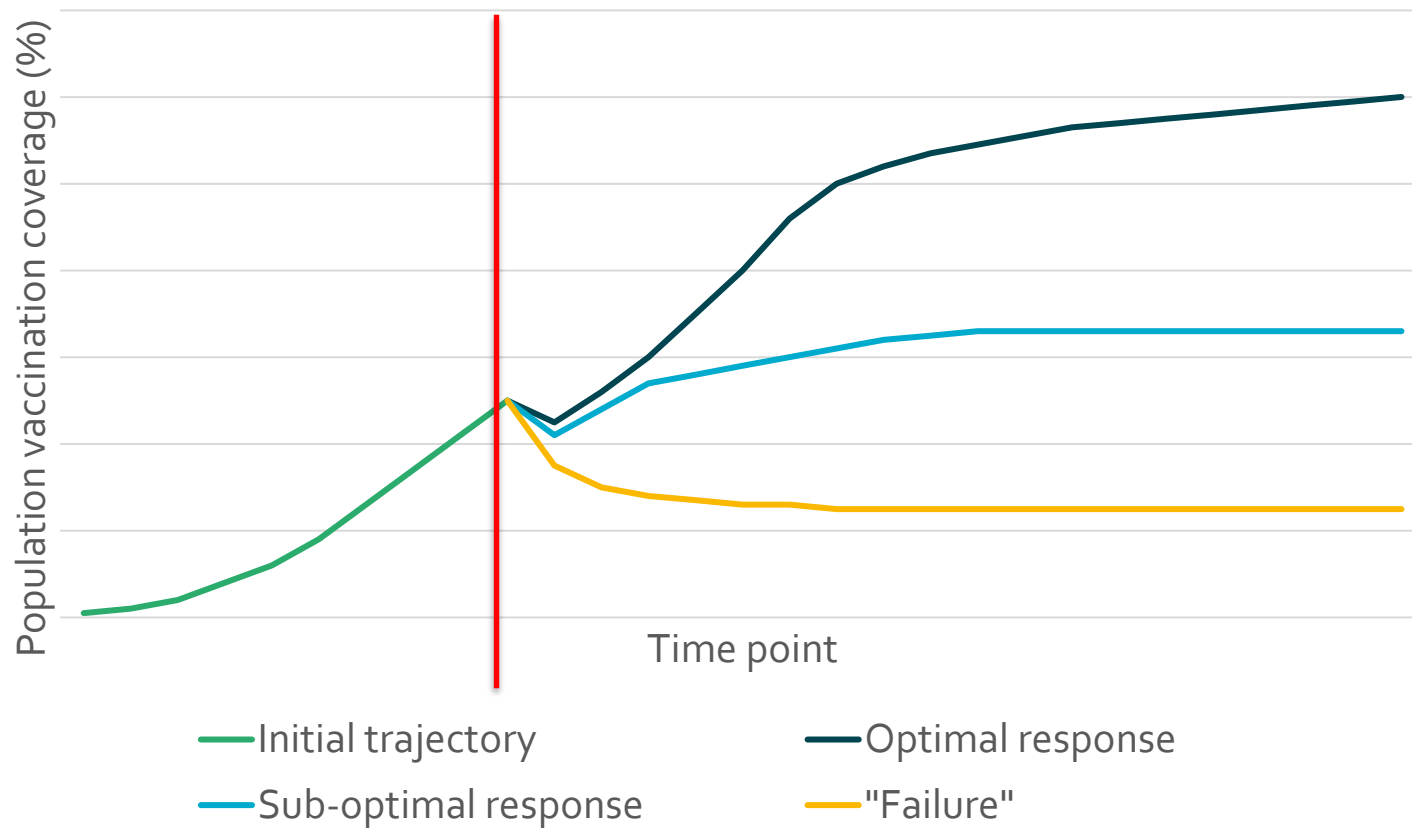
We do not have a clear picture of :

1. Vaccination system **characteristics or capacities** that explain how and why national systems adapt (or do not) to new service pressures;
2. Effective intervention strategies to **reinforce system resilience** (i.e. to maintain or exceed threshold coverage rates).

Outcome trends: a snapshot



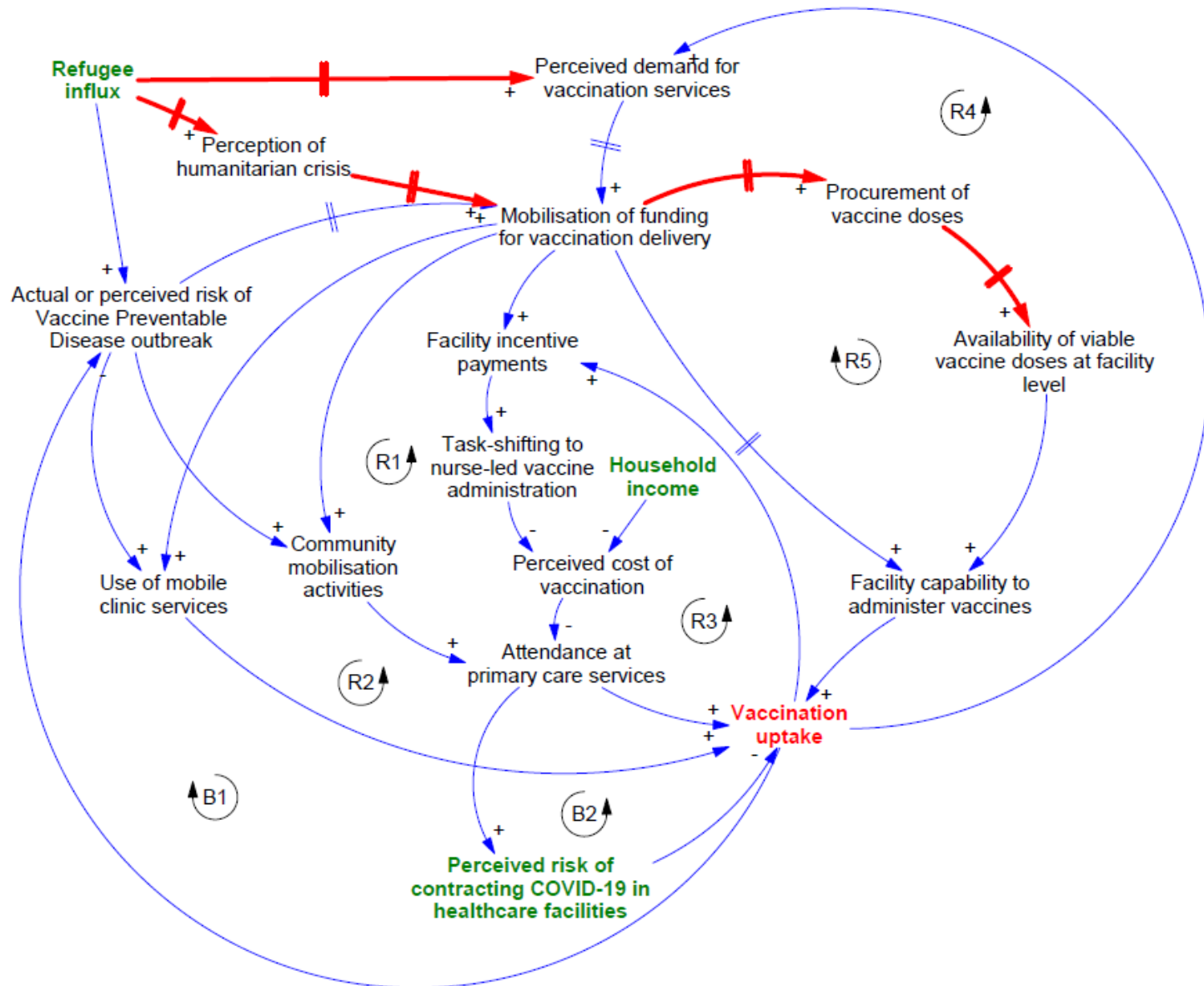
Reference modes for the study



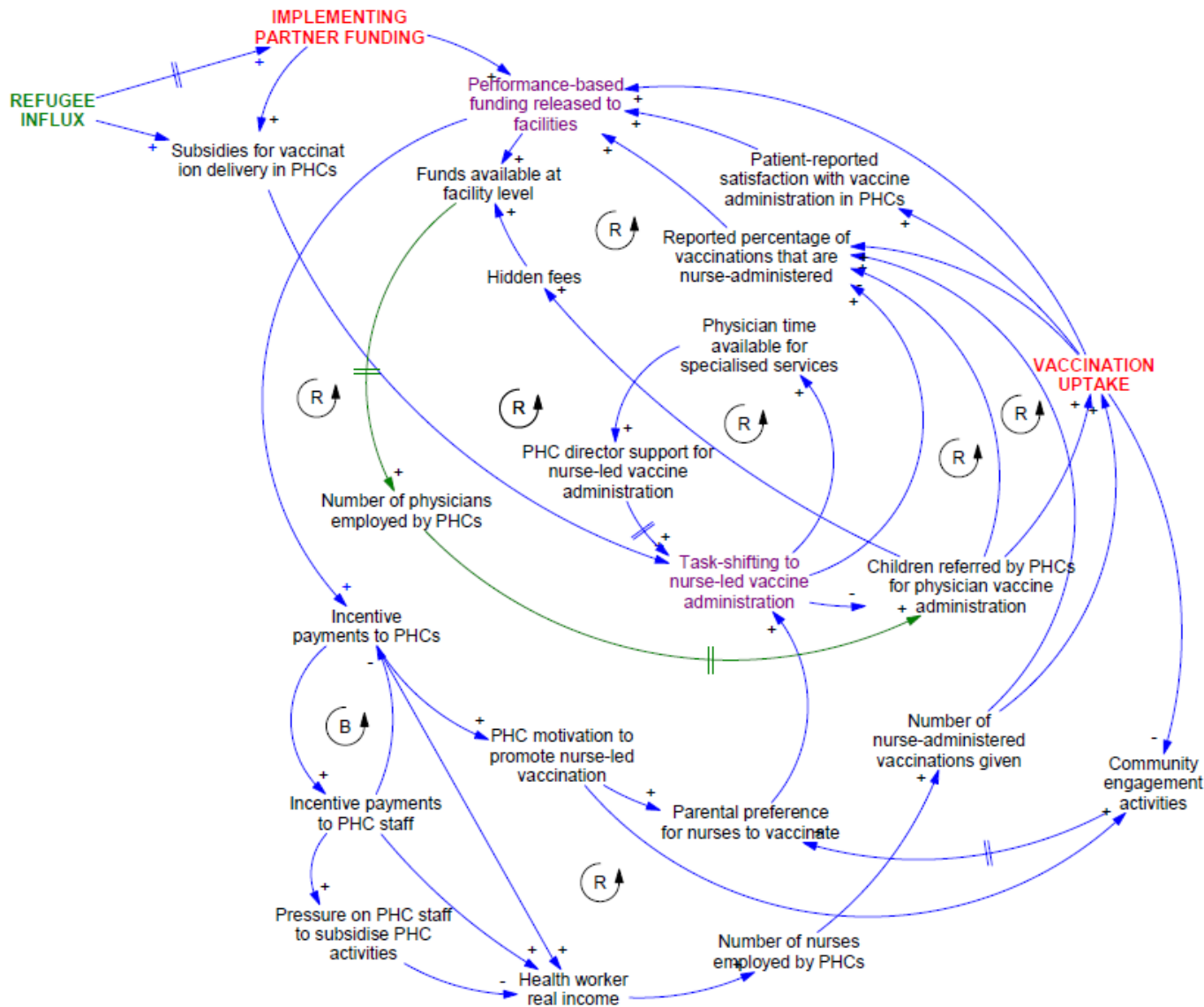
A qualitative system dynamics approach:

- Key informant interviews with n=38 stakeholders identified using purposive sampling
- Purposive text analysis of interview transcripts for causal language
- Construction and then pruning of individual stakeholder CLDs
- Stepwise process of CLD combination by stakeholder group
- Validation using a reserve set of interviews

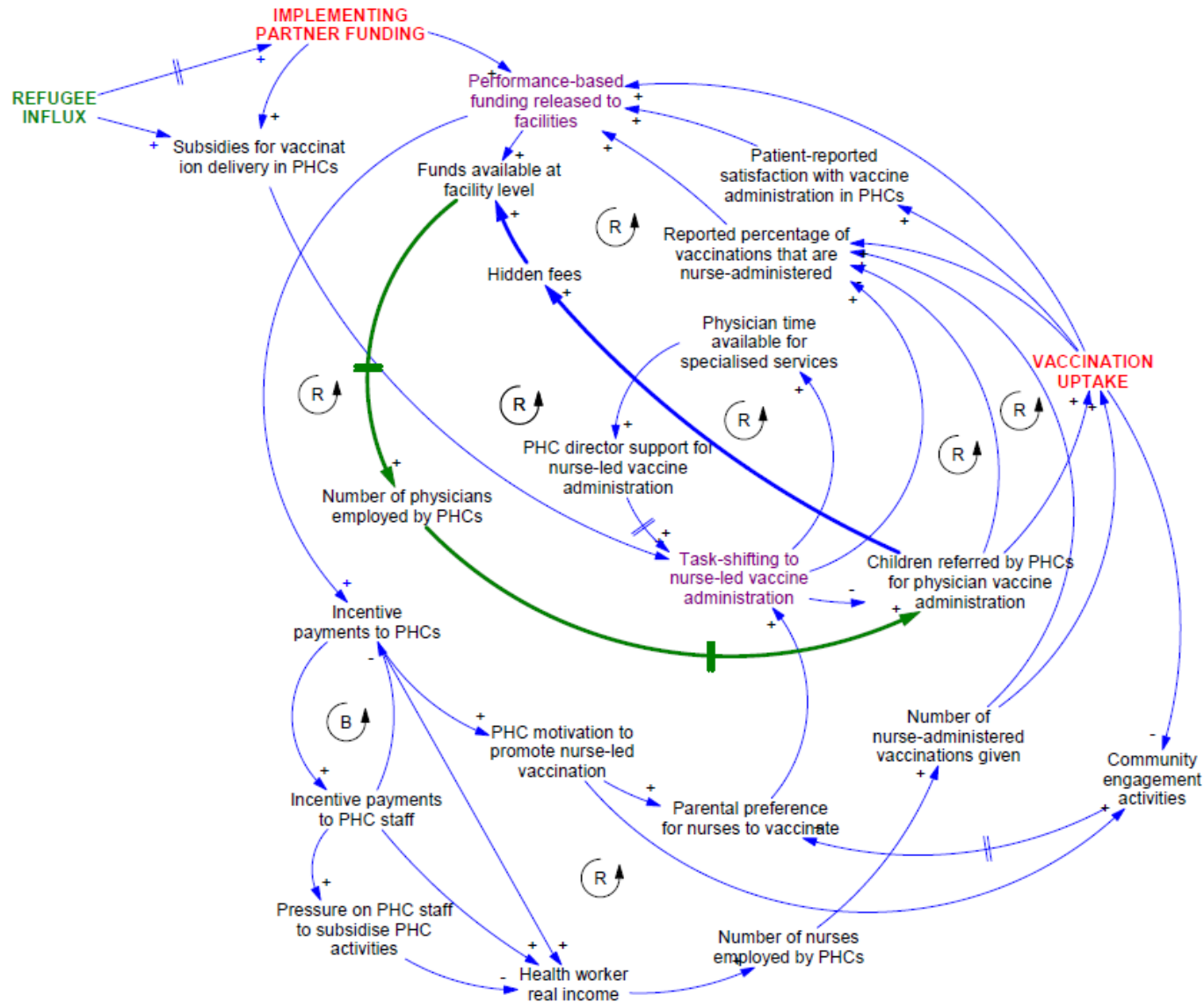
Shock-related dynamics: a bird's eye view



Zooming in: facility-level dynamics



Zooming in: facility-level dynamics



What is all this telling us?

- Shock responses are contingent on existing vulnerabilities, and play out at multiple levels within the vaccination delivery system
- Shocks can interact in unexpected ways to create new vulnerabilities or possibly tip systems over into new resilience states
- Assessing system resilience likely depends on a combination of “hard” metrics, systems insights, and service-specific outcome measures
- Intervention at multiple levels likely needed to boost vaccination delivery system resilience

Final thought: the weight of language

*"I started to **get annoyed by the word resilience**...at one point of time, resilience was a positive term in the Lebanese context. Now you are getting your knocks on the head in more frequent situations that you are no longer able to experience recovery in a way. This is only human, we cannot be supermen and women – **after you get 2, 3, 4, 5 knocks same day or some moment, it is no more resilience it is either you die or you don't die, it is survivorship**"*

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