Impact of COVID-19-related care disruptions on cervical cancer screening in the United States

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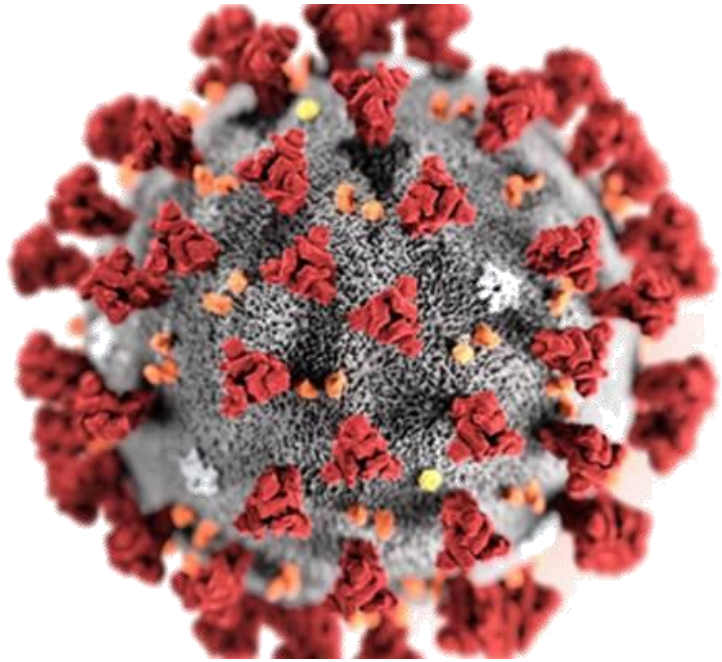
Disclosures

- Karen Canfell is the co-PI of an investigator-initiated trial of cervical cancer screening, Compass, run by the VCS Foundation, which is a government-funded not-for-profit charity. Neither KC nor her institution have received funding from industry for this or any other research project.
- All other authors declare no conflicts.

Background

- Secondary impacts of the COVID-19 pandemic on preventive health care, *e.g.*, cervical cancer screening, are unknown
- COVID-19-related disruptions may delay multiple steps in the screening process
- Simulation models can quantify health consequences of alternative screening disruption scenarios and isolate complex interactions of the screening pathway

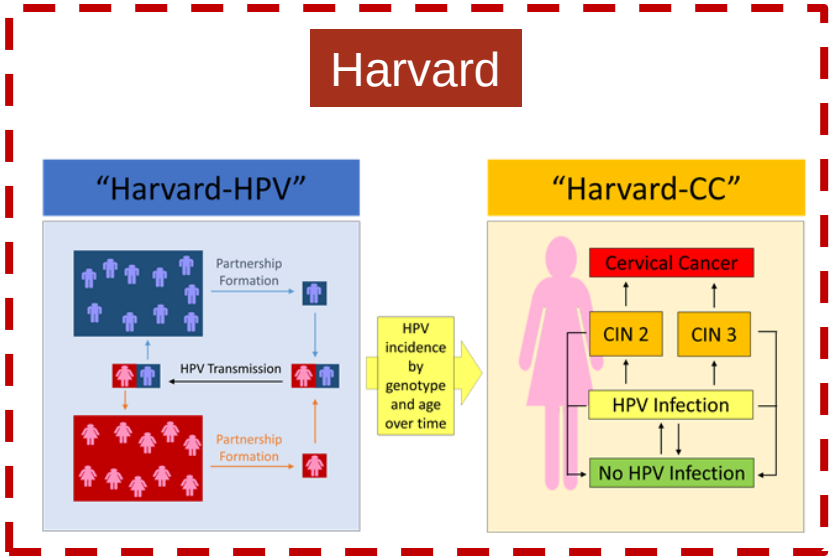


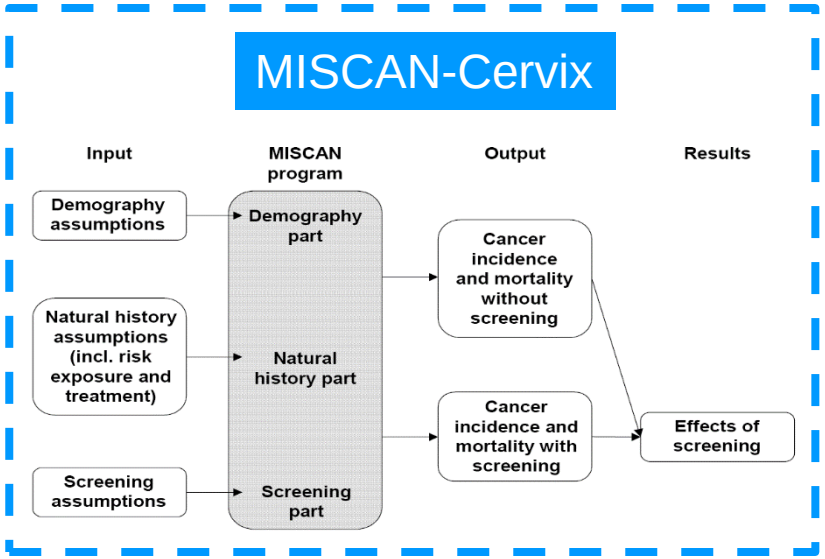
Objective

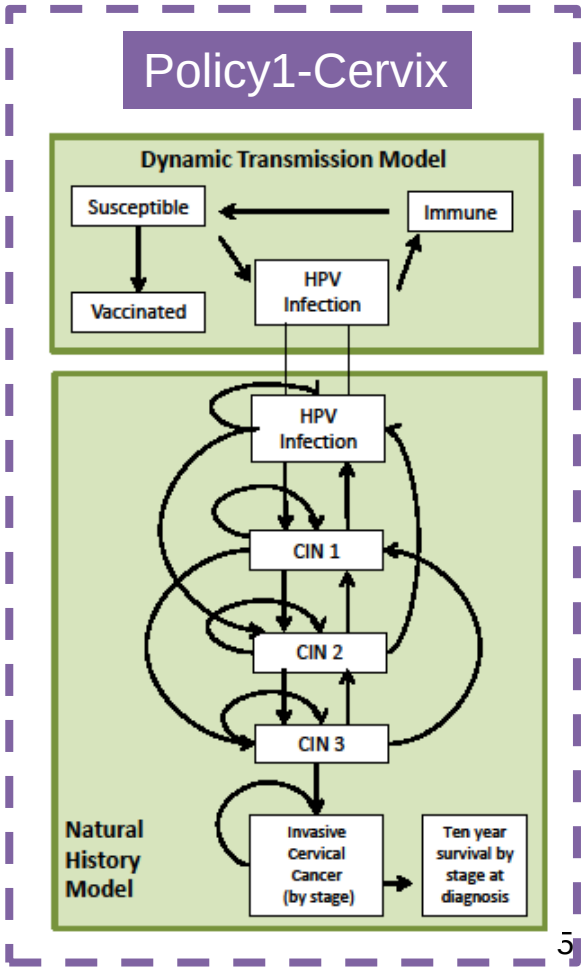
To quantify potential cervical cancer screening-related impacts of alternative COVID-19-related care disruptions, stratified by primary screening modality (i.e., Pap or Pap+HPV cotest), duration of disruption (i.e., 6 or 24 months), and step in the screening process (i.e., primary screening, surveillance, colposcopy, precancer treatment).

Methods: Overview

- Three CISNET-Cervical models
- Different structures, e.g., health states, cycle length
- Calibrated to human papillomavirus (HPV) and cervical cancer burden in the US
- Projected cervical cancer cases between 2020-2027







Methods: Scenarios

		Duration of disruption (months)			
Screening modality	Scenario	Primary Screening	Surveillance‡	Colposcopy	Excisional treatment
Primary Pap test	1a	6	6	6	6
	2a	6	6	6	1
	3a	6	6	1	1
	4a	6	1	1	1
	5a	24	24	24	24
	6a	24	24	24	1
	7a	24	24	1	1
	8a	24	1	1	1
Primary co-test (Pap + HPV test)	1b	6	6	6	6
	2b	6	6	6	1
	3b	6	6	1	1
	4b	6	1	1	1
	5b	24	24	24	24
	6b	24	24	24	1
	7b	24	24	1	1
	8b	24	1	1	1

Limitations

- Quantify number of women (and family members) who might acquire COVID-19 as a results of screening-related visits

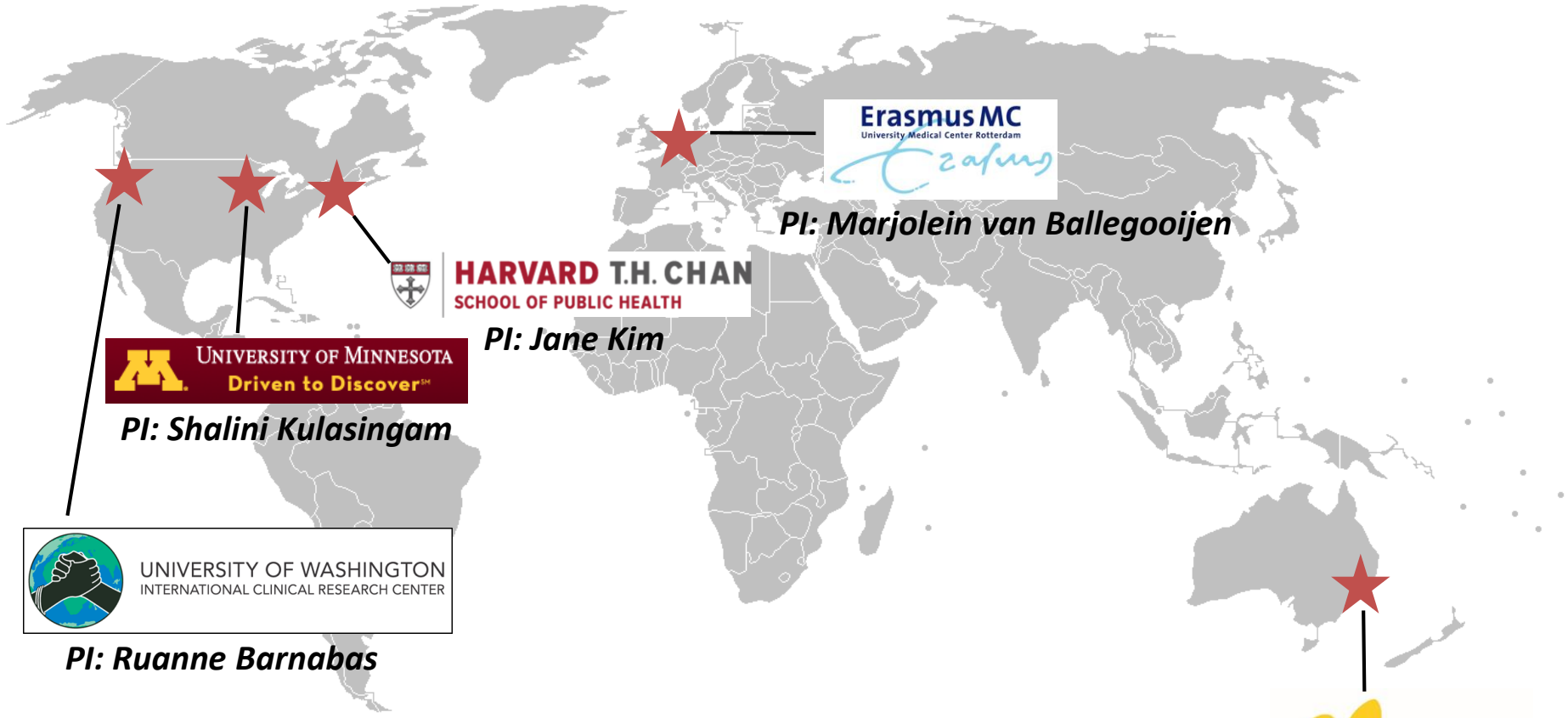
- All women face disruptions to screening, and screening services resume immediately following COVID-19 disruption period

Conclusions

- Temporary suspensions in cervical cancer screening pathway may result in temporal shifts in cancer detection
  - Small net increases in cancer burden

- Prioritizing reintroduction of services for women in need of surveillance, colposcopies or excisional treatment, as well as women whose last primary screen did not involve HPV testing, may mitigate the potential secondary impacts of COVID-19 on cervical cancer

Thank you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