A thread by **Tom Inglesby**

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To greatly lower risks of easing social distancing in US in time ahead, states will need to build highly capable pub health case management. @JHSPH_CHS & @ASTHO just released new plan on that: led by @C_R_Watson, A Cicero, @mfraserdct, J Blumenstock


Would encourage you to read full report. To summarize some key points: once COVID cases come down from peak, case identification+contract tracing- similar to what PH does for TB, syphilis, vaccine preventable disease- will be pivotal to controlling the disease in the US.

Pub health will need to identify nearly all cases; ensure they're isolated at home, or as needed isolated on voluntary basis in facilities provided for them, & identify + quarantine all exposed close contacts in their homes, or on voluntary basis in other dedicated facilities.

Other places in world have shown value of these efforts. Eg. South Korea, Taiwan and Singapore all have strong contact tracing programs that have helped keep COVID epidemics in their country under comparably far better control than many other places in the world.

In Wuhan China pop 11M, 1800 contact tracing teams of 5 people each (9000 persons in total) were deployed to do meticulous case and contact identification to bring that city's very serious COVID epidemic under control.

New Zealand pop 4.8M and Iceland pop. 324K have both have had more success w COVID through extensive contact tracing efforts paired w use of new technologies. Iceland navigates privacy concerns w/ these technologies by having user agreements and deleting info after resolution.

New Zealand at this point reports it is so successful at tracking disease that only 2% of their cases come from unidentified community transmission. Compare that to the US at this point where the great majority of cases are from community transmission at this point.

In US, for this effort to work, cases and contacts will need to be identified rapidly to prevent transmission. Cooperation btw cases and contacts will be key. Size of effort will need to be very large and resource intensive. US pub health has never done anything like this.

Extrapolating from numbers of tracers needed in New Zealand and Iceland (which never had very high relative case burden) and in China, an estimate of the number of contact tracers needed for COVID case and contact finding effort across the US is 100,000.
@WHO advises contract tracers be able to assess symptoms; investigate, follow up contacts; have basic analytical skills. This can be taught to people w high school degree. Training needed in disease principles, ethics, cultural sensitivity, risk comm, data management et al 10/x

Local knowledge of a community would be key skill for as many tracers as possible. Most work could be done remotely by phone or using other tech. But may need some in home follow up, always w/appropriate PPE. 11/x

State and local pub health should manage the hiring of this workforce, with other local agencies that could help. State emergency authorities should speed hiring process. 12/x

Technologies that could help should either: 1) help identify those w clinically confirmed COVID 2) list close contacts 3) communicate w/ close contacts and connect them with dx and self isolation info 4) monitoring of people on list and/or 5) Help w visualization, analytics. 13/x

Privacy and responsible data management will be critical issues to ensure, with clear communication to public about how technology will be used, adherence with all legal protections, and provision of extensive safeguards. 14/x

100,000 workers at average of $17/hr (avg pay for community health worker) is $3.6B for a year, which Congress should provide immediately in the coming 4th Stimulus Package. 15/x

Potential workforce could come from persons recently unemployed because of COVID, retired pub health or safety workers, med personnel, Med Reserve Corps, returning Peace Corp members; community health workers. Skills in interviewing and communication would be valuable. 16/x

To paraphrase @DrRichBesser's wise comments - for this to succeed, will need equity + true community engagement. People need to believe it will serve their interests, will need trust in those in charge of quarantine, will need resources to quarantine. I absolutely agree. 17/x