

# Cancer Medicine, Digital Health and the Covid Pandemic....and After....

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# *Medicine is slow to change.....until Covid*

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*The Covid pandemic presented medicine with an unprecedented challenge and no previous experience to act on*

## *Patient Care Re-design*

- Rapid modification of diagnostics, treatment, follow-up
- Rapid need to streamline care and reduce in-person care
- Rapid need to manage inefficiencies of care

## *Data.....*

- Rapid need for real-time data to better understand Covid-infected and Covid non-infected cancer patients



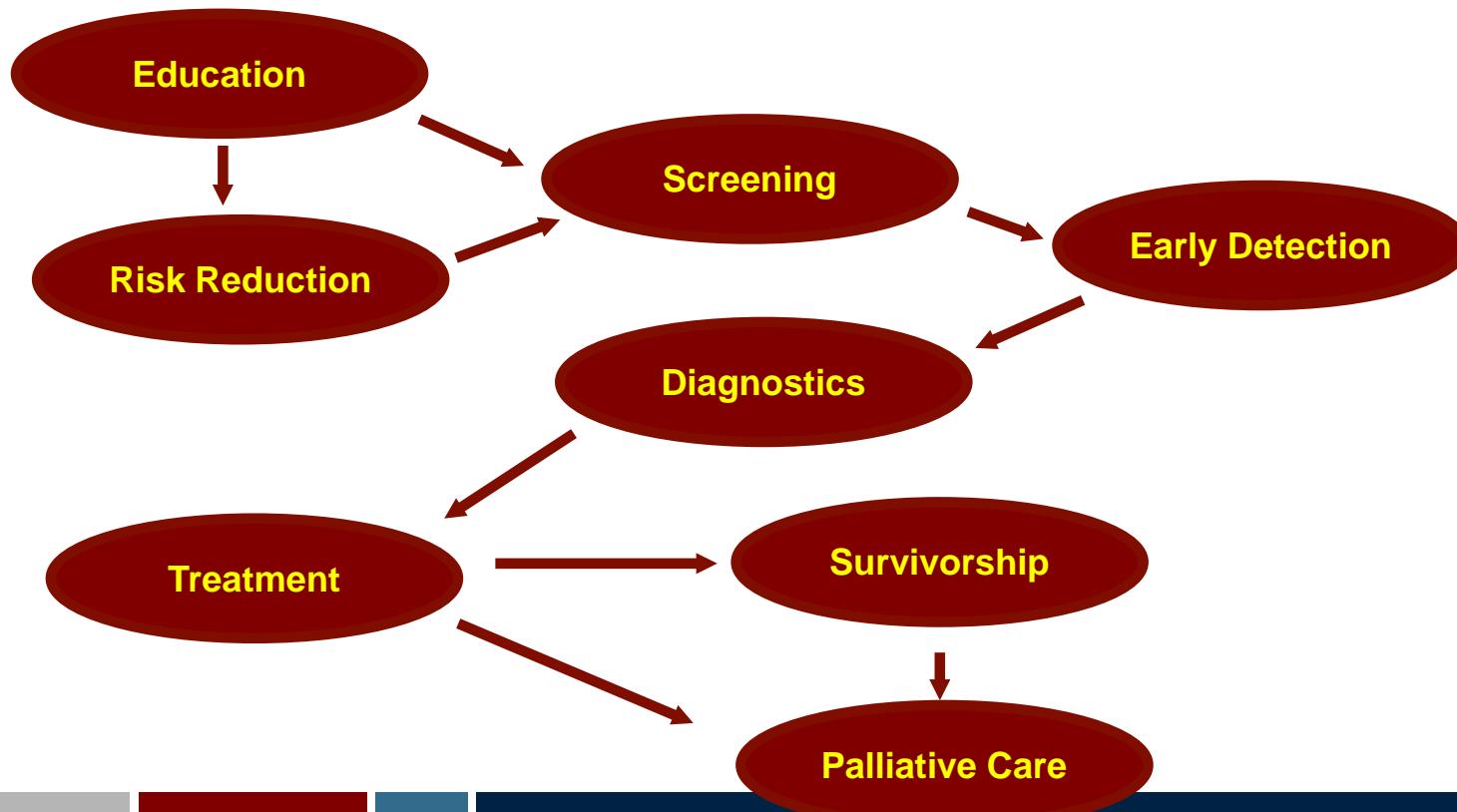
# *Is Cancer Medicine Different than the Rest of Medicine?*

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- ▶ Many different cancers with different “urgency” of diagnosis and treatment
- ▶ Potentially lethal disease if not diagnosed and treated
- ▶ Prognosis often linked to stage at diagnosis
- ▶ Screening, diagnostics, surgery, systemic therapy, radiation, surveillance – complex interactions
- ▶ Therapy increasingly complex and toxic



# *The Continuum of Cancer Care and Services*



# *Why are we in Medicine so far behind?*

## ► Banking

1. Completely in person – withdrawals/deposits, M-F, 9AM-3PM. Bill pay by check and mail
2. ATMs for cash
3. Direct deposit paychecks
4. Deposits in ATMs
5. Electronic Payments - Bill pay
6. Deposits by smart phone
7. ATMs in Kigali, Rwanda

*When was the last time you waited in a teller line? Went to the bank in person?*

***Medicine has been stuck in #1***



# *Clinical Investigation - Trials*

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- ▶ Accrual often suspended
- ▶ Patients currently on trial often followed remotely for many visits – including assessment of toxicity, etc
- ▶ Patients consented, enrolled, and followed remotely when feasible – allowing for greater access to trials for patients
- ▶ Will any of these changes “stick”??



# **Palliative care/end-of-life care**

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- ▶ Sickest patients whose travel to hospital is most difficult/burdensome
- ▶ Palliative care consultations and on-going care via Tele-medicine
- ▶ Consultation rate increased, no-show rate decreased
- ▶ Increase in declining “nth” line therapy
- ▶ Increase in Serious Illness Care Discussions (Ariadne labs)
- ▶ Increase in early hospice use



## *Some thoughts....."Augmented Intelligence"*

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- ▶ Doctors, nurses, lab techs, etc, will not be replaced
- ▶ The workforces are limited
  - We need to decide what people need to do vs what technology can do – as well or better!
- ▶ Need exacerbated by the rapid development of technology and therapeutics, and growing complexity of cancer medicine
- ▶ Need exacerbated by the Covid Pandemic



# *Some thoughts....."Augmented Intelligence"*

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- ▶ Technologies must be tested for efficacy and safety
- ▶ Technologies must be tested for efficiency and acceptability
  - What is acceptable and good for patients, and improves their interaction with the healthcare system and their outcomes?
  - What is acceptable and good for providers?
- ▶ Financials and payment models must support these models of care
  - What will payors be willing to pay for?



# *NCPF Workshop – before Covid*

## Developing and Sustaining an Effective and Resilient Oncology Careforce: Opportunities for Action

Samuel U. Takvorian, MD, MS ,<sup>1,\*</sup> Erin Balogh, MPH ,<sup>2</sup> Sharyl Nass, PhD,<sup>3</sup> Virginia L. Valentin, DrPH, PA-C ,<sup>4</sup> Lori Hoffman-Hogg, RN, MS, AOCN,<sup>5</sup> Randall A. Oyer, MD,<sup>6</sup> Robert W. Carlson, MD ,<sup>7</sup> Neal J. Meropol, MD,<sup>8</sup> Lisa Kennedy Sheldon, PhD, APRN, AOCNP, FAAN ,<sup>9</sup> Lawrence N. Shulman, MD, FACP, FASCO<sup>10</sup>

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# *Data.....we need data.....and fast!!*

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- Need to rapidly understand effects of Covid infection on cancer patients
- Need to rapidly understand the effects of the pandemic on cancer patients not infected with Covid
- Need to assess effectiveness and safety of alterations to care

*Currently our data systems are not equipped to do this*



# Now what???

- ▶ Providers, regulators, payors and patients need to come together to facilitate change
- ▶ Ossified aspects of cancer care need to be filed with the dinosaurs

***“Bureaucracy is the death of any achievement”***

***Albert Einstein***

***“Everywhere the old order changes and happy they who can change with it.”***

***William Osler***



# *Thank You*

*We need to learn from this experience  
We need to carry forward “the good”*

