Real World Data from Real World Patients

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Kaiser Permanente
Health System Representative of a Real World Population

- Largest Integrated System in the USA
  - Providing both care and coverage in one system
  - Aligned Incentives
  - Coordinated Care along the Continuum
  - 21 Accredited Cancer Centers in Northern California

- Kaiser Permanente Health Connect: Robust EMR
  - Patient information housed in one, easily retrievable place
  - Facilitates coordinated care for >8 million patients in California
  - Patients able to manage own health
    - Appointments, refills, securely email physician

Our patients receive 96% of their care within our system
Kaiser Permanente and the FDA
A Natural Collaboration

- OHOP-interest in better understanding various types of clinical data which can be generated in a real world setting
- KP-interest in operationalizing the ‘patient’s voice’ (PROs) in clinical workflows

Only made sense to…..

1. combine expertise to study the integration of PRO measures in a large healthcare delivery system
2. study the natural history of patient reported physical function in an advanced real world pancreatic cancer population
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Pancreatic Cancer Patient Reported Outcomes using the electronic medical record
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Goals

- Assess feasibility and logistical challenges associated with incorporating an electronic PRO into an EMR
- Characterize natural history of Physical Function in real world Pancreatic Cancer using PROs and ClinRO
- Examine Score Change that would reflect a clinically meaningful difference in PF in both the PROMIS and ECOG measures
- Describe relationship between PF change and clinical events captured on the EMR
  - New therapy, dose modifications, hospitalizations, Palliative Care Conversations, Hospice Referral

*Establish an intimate working relationship between the FDA and KP*
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Tools

- PROMIS 10a (Short Form, Physical Function)
  - Every Outpatient Oncology Visit; at least monthly

- PGIS Anchor Questions (at baseline and each follow up)
  - “In general, how would you rate your current Physical Function?”
  - “Choose the option that best describes your current Physical Function compared to the last Doctor’s visit (at this office)?”

- ClinRo-ECOG score at every visit, at least monthly
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Workflow
DOR – Oncology PROMIS-10 Questionnaire High Level Workflow

**Workstream #1: Pre-App. (Pt. @ Home)**

- Attach PROMIS-10 Qx to Patient Secure Message for completion via KP.org.

**DOR – Project Coordinator**

- Did PT. complete PROMIS-10 Qx via KP.org?
  - Yes
    - Send communication to ONC staff/CRA re: the need for Welcome Tablet during in-person visit
  - No

**Patient**

- Is PROMIS-10 Qx completed via Welcome Tablet?
  - Yes
    - Provide Welcome Tablet to Patient
  - No
    - Conduct Tel. Enc. with patient and complete PROMIS-10 Qx via Suspended Hyperspace

**Workstream #2*: Clinic Visit (Chemo. Ctr. / Onc. Dept.)**

- Target timeline for Tablet deployment: mid-May 2018

**Clinic-Based ONC Staff/CRAs (Clinical Trials)**

- Receive MRNS from DOR of target pts needing to complete PROMIS-10 Qx in clinic
- Review Flowsheet / Clinic schedule (TBD)
- Is PROMIS-10 Qx response visible?
  - No
    - Review Flowsheet / Clinic schedule (TBD)
  - Yes
    - Is PROMIS-10 Qx response visible?
      - No
        - Provide Welcome Tablet to Patient
      - Yes
        - Review Flowsheet / Clinic schedule (TBD)

**Clinic Providers / DOR Team**

- Review PROMIS-10 Qx responses

**Workstream #3: Post-App. (Pt. @ Home)**

- Review PROMIS-10 Qx responses

End of Workflow

* Target timeline for Tablet deployment: mid-May 2018

TBD: To Be Determined
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Sending patient questionnaire via secure message
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What the patient sees when logging on…

https://hpren.kaiserpermanente.org/health/mycare/consumer/my-health-manager/message-center/from-my-doctor/it/p/a1/04_Sj9CPykssy0xPLMnMz0vMAfkjzOIDQ4MCnZwA

Inbox
From my doctor

Help with e-mailing my doctor

Promis10a KP.org testing

To: Creskinw S Acncggpcc
From: Twoeb Benma
Received: 4/27/2017 1:29 PM PDT
Tasks:
- Physical Function Assessment

Promis10a KP.org testing

Reply  Delete

Click on link

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Integration into our electronic medical record...
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Oncology clinic staff starts the process…

Insert your card or touch Start to begin

English
Title: KPHC Welcome Tablet Questionnaire – Incident Workflow

Reg / MA
- Contacts Service Desk
- Contacts Local Site Support
- Resolved

TPMG
- Work with Local Teams to Train Users / Adjust Workflows
OAT / FOOI

KPHC Site Support
- Open Ticket
- Issue Resolved?
  - Yes: Flowchart continues
  - No: Flowchart continues
- Workflow / Training Issue?
  - Yes: Engage local TPMG OAT / FOOI
  - No: Flowchart continues
- Hardware / OS Issue?
  - Yes: Route INC ticket to local ECS
  - No: Flowchart continues

Service Desk
- Open Ticket to Local ECS
- Hardware / OS Issue?
  - Yes: Flowchart continues
  - No: Flowchart continues

Local ECS
- Diagnose Tablet
- Hardware
- Contact Requestor & Close Ticket
- Re-image as necessary
  - Provide loaner from break-fix inventory as needed
- Open Ticket to KPHC CN Regional Support
  - Begin Summary with NCAL WEL TAB QX
- Contact Requestor & Close Ticket

KPHC
- Resolved
- Assign to KPHC CN WELCOME TECH
  - Coordinate Resolution with Vendor
  - Vendor Issue?
    - Yes: Flowchart continues
    - No: Flowchart continues
- Assign to KPHC CN WELCOME TECH
  - Fix KPHC Welcome Issue or Coordinate with other HP groups
- Contact Requestor & Close Ticket

Epic
- Fixed as Required
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Operational Insights

- Outreach to patient too rapid and thus, overwhelming
  - Practice to reach out to patient within 1 week of initial Oncology Visit
    - “Too quick”; “Need more time to process diagnosis”
- Patient preference for ‘live person’
  - Increased Response Rate with phone call
  - Emotional nature of diagnosis?
- Incorporation as routine part of Oncologic care
  - Every patient, every time
  - Workflow for Oncology Providers/Staff
- Tangible benefit needed for patients
  - Symptom management, care decisions
In Gratitude…

NIH/NCI

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