Establishing a Population Science Research Core at Rutgers Cancer Institute of New Jersey

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Background

• Rutgers Cancer Institute has numerous shared resources that are available to faculty for research purposes:
  – bioinformatics
  – functional genomics
  – histopathology
  – pharmacokinetics
  – research pharmacy

• The shared resources do not sufficiently address the data collection and research study management needs of the 40 full and associate faculty in the Division of Population Science and Cancer Prevention and Control Program
Phase 1: PLANNING

January–May 2016

Needs Assessment

- **Met** with faculty to discuss their needs
- **Contacted** cores and units at other institutions
- **Established** initial services to be provided by the Core
  - automated research study management tools
  - participant tracking
  - electronic data collection
  - data management
- **Identified** potential future services

Logistics

- **Identified** software solution (DatStat) and negotiated purchase price and consulting hours
- **Obtained** institutional funding ($70,000) for Year 1
- **Identified** a staff member for the Core
- **Obtained** all relevant permissions to use DatStat

Initiation Plan

- **Identified** individuals to receive training on the software
- **Formed** a Steering Committee for the Core
Example Research Study

1. **Study Invitation**
2. **Eligibility**
3. **Consent**
4. **Baseline online survey**
5. **Randomization**
   - **Usual Care**
     - **Follow-up 1 online survey**
     - **Follow-up 2 online survey**
     - **Medical Form**
   - **Intervention**
     - **Follow-up 1 online survey**
     - **Follow-up 2 online survey**
     - **Website Usage Form**
9. **Follow-up 1 online survey**
10. **Follow-up 2 online survey**
11. **Medical Form**
12. **Medical Form**
Research Study Workflow Automation

**Tasks:** What needs to be done?
*Surveys/forms, phone calls, emails, appointments*

**Timing:** When should it be done?
*“Automated email 7 days and then 2 days before follow-up is due”*

**Rules:** What determines what needs to be done?
*“If preferred survey mode is ‘web’, then send email. If ‘phone’, schedule call.”*

**Status:** What happened?
*Email was sent, phone call completed, etc.*
Phase 2: INITIATION

June–July 2016

Training

- **Trained** four faculty and five staff members to use the DatStat software
- **Completed** additional training via webinars with DatStat consultant

Marketing

- **Gave** informal presentations to select faculty and staff
- **Identified** 2 initial projects

Metrics

- **Established** the goal of having the Core utilized in 5 research projects in Year 1
- **Created** an evaluation for user feedback
- **Created** a system for tracking Core staff time/activities for each project
- **Quarterly** usage report to Research Administration
## Phase 3: IMPLEMENTATION
August 2016–May 2017

### Activities
- **Developed** standard language about the Core for grant submissions and IRB protocols
- **Established** project start-up tasks and requirements
- **Created** standard operating procedures for user audits
- **Held** monthly Steering Committee meetings
- **Conducted** ongoing marketing
- **Initiated** sustainability planning

### Core Usage

#### COMPLETED PROJECTS
- Facilitating informed decisions for prophylactic mastectomy
- Internet intervention for sun protection and skin self-examination behaviors

#### ONGOING PROJECTS
- Randomized three-arm trial to evaluate the effect of neoadjuvant apalutamide alone or in combination with abiraterone acetate in men with high-risk prostate cancer
- Peer mentoring to promote receipt of follow-up care for adolescent and young adult childhood cancer survivors

#### FUTURE PROJECTS
- Randomized trial of a social media-delivered intervention targeting indoor tanning users (grant likely to be funded)
- A social media behavioral intervention for young onset melanoma patients and their family members (grant submission)
- Health beliefs and behaviors among squamous cell carcinoma patients (upcoming funded project)
Phase 4: SUSTAINABLE GROWTH

Activities

• **Hire** an additional half-time staff member
• **Implement** a chargeback mechanism for the Core’s services
• **Request** developmental funding as part of the Cancer Institute’s Cancer Center Support Grant submission
• **Market** the Core more broadly to increase faculty usage
• **Identify** and establish collaborations with other resources and cores at Rutgers
  – Office of Human Services Research (Cancer Institute)
  – Biostatistics and Epidemiology Services (School of Public Health)
• **Connect** with similar cores and resources at other institutions

Longer-Term Support/Growth Plan

• **Identify** and implement other Core services that we could offer:
  – assistance with survey design
  – computerized tailoring of interventions
  – clinic- and community-based recruitment of participants

March 2017–???
Lessons Learned

• Delegation
• Time management
• Business model approach
• Collaboration and connections
• Simultaneous marketing, implementation, evaluation, and sustainable growth planning