Hidden Figures: The Role of IT Programmers in **CCSG** Preparations

Cancer Center Administrators Forum May 2017

Panel

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Purpose of Panel Discussion

- To acknowledge the essential role that IT programmers play within a Cancer Center's administrative infrastructure in support of the CCSG
- To illuminate the different organizational approaches to providing IT support and discuss the pros and cons for the various models
- To discuss best organizational practices for IT programmer support for Cancer Centers in context of CCSG

Defining IT Programmer

- · Individuals who have expertise in programming and designing IT solutions for data management and reporting and/or accessing the back-end of vendor systems to pull, manipulate, and integrate data for reports needed to manage your Center's CCSG-related research activities
- These are not the individuals who provide:
 - programmers supporting bioinformatics/biomedical informatics - general hardware/networking support

 - purchase and set up of computers and servers
 - end user support when computers are not functioning
 - training and password support for vendor-supported systems - general QA of data entered into systems and/or entering data
 - audio/visual technical support for your Center



Why Is This Topic Important?

- New Center/CCSG Administrator and not sure what positions are essential
- CCSG Administrator facing big budget cuts and need to understand what positions are mission critical
- Being pressured by institution to relinquish IT programmer positions for a centralized resource
- IT programmers need to understand the value-added that they bring to the Center/CCSG effort

Today's Panel

- Three CCSG Administrators from different types of Centers who are going to present how they have incorporated IT Programmers into their CCSG-focused team
- They are going to discuss the pros and cons of how they have configured their IT programmer support
- We have embedded interactive questions (with the audience) to poll all of the Centers regarding their IT Programmer support after each presentation

| CEDARS SAMUEL OSC COMPREHENS | |
|----------------------------------------|-----------------------------------------------------------------------------------------------------|
| Characteristics | Description |
| Organizational Type | Non-University Affiliated, Non-Free Standing, Matrix Center embedded in a 886 bed hospital |
| Research Conducted | Basic/Clinical/Population Science/Translational |
| Number of Members | 76 Members, 36 Associate Members, 98 Clinical Program Members, 5 Members In Training - 215 Total |
| Annualized Funding Base (Direct) | \$15-30 Million |
| # of New Cases (DT3) | >5000 |
| # of Clinical Trials | 130 Open to accrual (100 Interventional), 200 Open to Follow Up |
| Annualized Enrollment by Trial Type | 400 Interventional Therapeutic, 120 Interventional, 400 Non-Therapeutic, Non-Interventional |

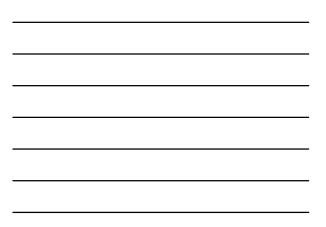
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| CEDARS SINAL COMPONENT CAMER INSTITUTE | | | | |
|----------------------------------------|-----------------------|----------------------------------|----------------------------|------------------------------------------|
| CCSG Support Requirements | | | | |
| Functional Area | IT System Used | # Cancer Center IT Support | # Enterprise IT Support | # Cancer Center Administrative FTE |
| Membership | Home Grown (CMAPS) | 0 | 0.1 | 0.2 |
| Funding | Home Grown (CMAPS) | 0 | 0.2 | 1.0 |
| Cancer Registry | Oncore | 0.2 | 0.2 | 0.2 + Outsourced Registry Management |
| Clinical Trials Reports | OnCore | 0.3 | 0.1 | 0.3 |
| Publications | Home Grown (CMAPS) | 0 | 0.1 | 0.2 |
| Biosketches | N/A | 0 | 0 | 0.1 |
| Core Facility Reports | iLab | 0 | 0.25 | 0.1 |

| CEDARS STAL Method Control Control Pros/Cons of IT Support Structure | | | |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------|--|--|
| Pros | Cons | | |
| Career ladders for developers enables retention and stability | No dedicated developers for CCSG needs | | |
| Ability to leverage existing IT infrastructure | Response time is challenging | | |
| Minimal cost to Cancer Center budget | Limited understanding of CCSG needs | | |
| Support from high quality developers | Development time takes longer | | |
| NA | Competing institutional priorities for limited resources | | |
| NA | Many systems/processes are driven by clinical needs, not academic needs | | |



| MOFFITT CANCER CENTER | | |
|------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| Characteristics | Description | |
| Organizational Type | Free-standing (206 beds) | |
| Research Conducted | Basic/Clinical/Population/Translational | |
| Number of Members | 151 | |
| Annualized Funding Base (Direct Costs) | \$50+ Million | |
| # of New Cases (DT3) | >5000 | |
| # of Clinical Trials | 443 Interventional: 183 Open to accrual, 238 Open to Follow Up | |
| Types of Trials Available Numbers Enrolled (FY16) | 1,407 Interventional; 1,080 Interventional Therapeutic; 24,372 Non-Interventional | |



| Support Requirements | | | | |
|-------------------------|-----------------------|--------------------|--------------------------|-------------------------------------------|
| Functional Area | IT System Used | CCSG IT Support | Enterprise IT Support | CCSG Administrative FTE |
| Membership | In-House (Marcene) | 0.25 | 0 | 0.5 |
| Funding | In-House (Marcene) | 0.5 | 0 | 1 |
| Cancer Registry | Cerner | 0 | 0.5 | 15 |
| Clinical Trials Reports | OnCore | 0.25 | 0 | 2 (system support) ~75 (certification) |
| Publications | In-House (Marcene) | 0.5 | 0 | 0.5 |
| Biosketches | In-House (Marcene) | 0.25 | 0.25 | 0.5 (renewal time only) |
| Core Facility Reports | Labvantage | 1 | 0.25 | 1 |
| MOFFITT | | | | |



| Pros/Cons of IT Support Structure | | | |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Pros | Cons | | |
| Robust network architecture | Clinical security needs (HIPAA) makes meeting academic needs challenging and at times restrictive | | |
| Budgeting process allows for CCSG specific requests | Many competing research and clinical priorities; challenging getting dedicated resources | | |
| Strong system stability and underlying structural support | Historical bias for commercial software over in-house development Addressing weak support of reporting, analytics and dashboards | | |
| Dedicated CCSG resources | Turnaround/Respond time, especially during renewals, challenging (limited resources) | | |
| Dedicated developer resources allowing for flexibility in design | In-house development takes longer when trying novel applications (harder to defend up front investment time) | | |
| | Offering competitive salaries | | |
| | CANCER CENTER W | | |

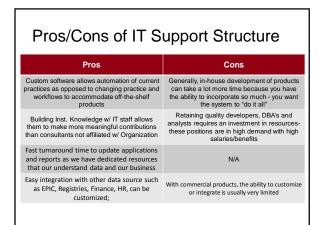


| | VERSITY |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Characteristics | Description |
| Organizational Type | Free-standing (308 beds) Cancer Hospital on The Ohio State University Campus |
| Research Conducted | Basic/Clinical/Population Science/Translational |
| Number of Members | 186 Full Members, 33 Associate Members, 41 Introductory Associate, 75 Affiliate Members – 335 Total |
| Annualized Funding Base | \$50+ Million |
| # of New Analytic Cases | >6,000 |
| # of Clinical Trials | 300 Open to accrual, 500 Open to Follow Up, |
| Types of Trials Available Number Enrolled | 3,591 Interventional 1,166 Interventional Therapeutic; 26,000+ Non-Interventional |

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CCSG Support Requirements

| Functional Area | IT System Used | # Cancer Center IT Support | # Enterprise IT Support | # Cancer Center Administrative FTE |
|-------------------------|---------------------|----------------------------------|----------------------------|------------------------------------------|
| Membership | Home Grown eRAMP | 0.3 | 0 | .25 |
| Funding | Home Grown eRAMP | 0.6 | 0 | 1.25 |
| Cancer Registry | OnCore | 1.75 | 0.1 | 17 |
| Clinical Trials Reports | OnCore | 1.75 | 0.1 | 2.0 |
| Publications | Oncore + Tableau | 0.5 | 0 | .75 |
| Biosketches | N/A | N/A | 0 | 1.25 |
| Core Facility Reports | Home Grown eRAMP | 1.5 | 0 | 5.0 |



Future Directions

- Education & Training
- Community Outreach & Engagement