

Hidden Figures: The Role of IT Programmers in CCSG Preparations

Cancer Center Administrators Forum
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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

IT Programmers Must be Integral to Your Cancer Center Operations



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-SINAI

SAMUEL OSCHIN
COMPREHENSIVE CANCER INSTITUTE

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



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



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



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

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	<p>Historical bias for commercial software over in-house development</p> <p>Addressing weak support of reporting, analytics and dashboards</p>
Dedicated CCSG resources	Turnaround/Respond time, especially during renewals, challenging (limited resources)
Dedicated developer resources allowing for flexibility in design	<p>In-house development takes longer when trying novel applications (harder to defend up front investment time)</p> <p>Offering competitive salaries</p>

The James



THE OHIO STATE UNIVERSITY
COMPREHENSIVE CANCER CENTER



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

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

Pros/Cons of IT Support Structure

Pros	Cons
Custom software allows automation of current practices as opposed to changing practice and workflows to accommodate off-the-shelf products	Generally, in-house development of products can take a lot more time because you have the ability to incorporate so much - you want the system to “do it all”
Building Inst. Knowledge w/ IT staff allows them to make more meaningful contributions than consultants not affiliated w/ Organization	Retaining quality developers, DBA's and analysts requires an investment in resources- these positions are in high demand with high salaries/benefits
Fast turnaround time to update applications and reports as we have dedicated resources that our understand data and our business	N/A
Easy integration with other data source such as EPIC, Registries, Finance, HR, can be customized;	With commercial products, the ability to customize or integrate is usually very limited

Future Directions

- **Education & Training**
- **Community Outreach & Engagement**