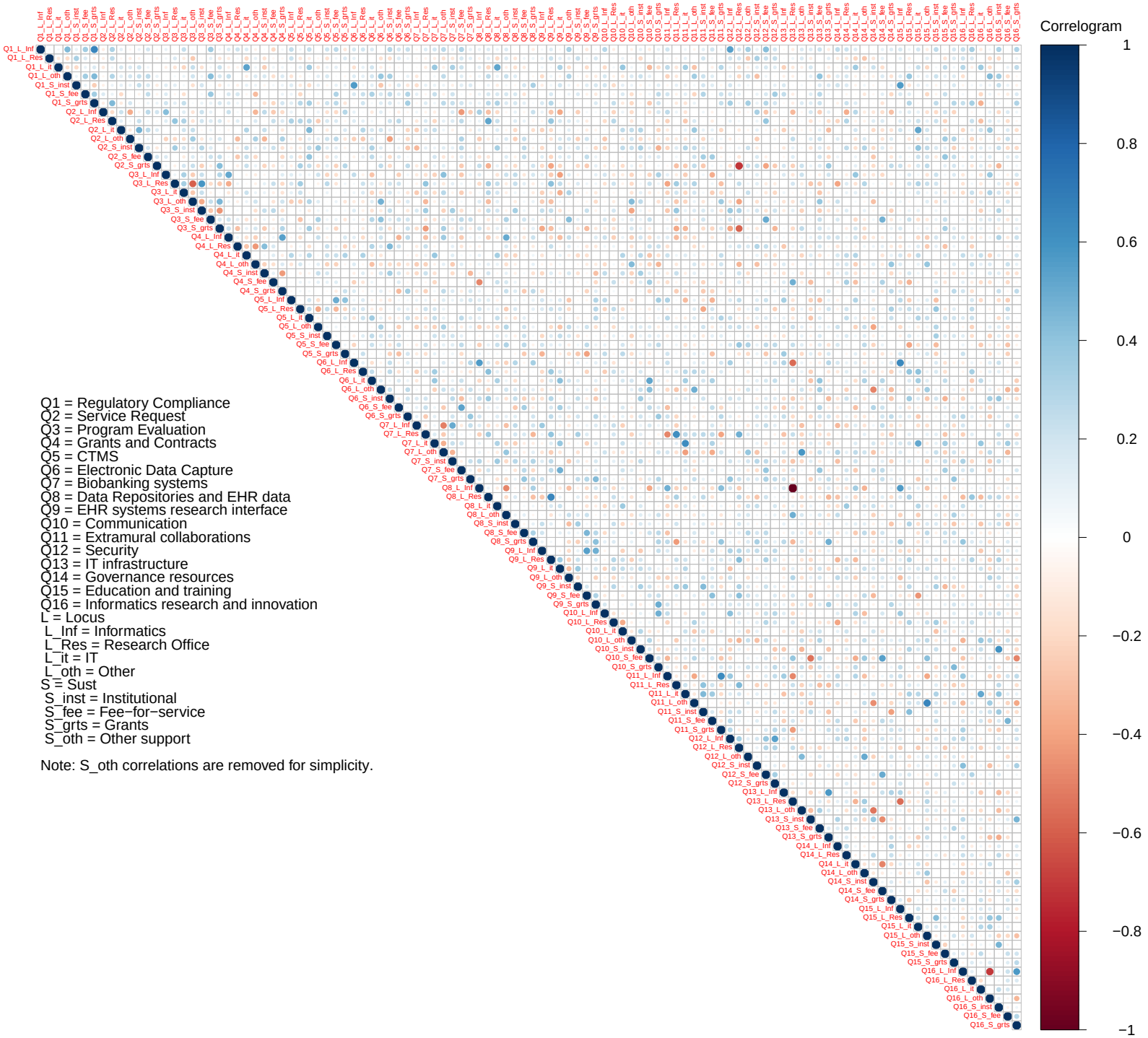
Supplementary Table 1: The working group converged on 66 resources, which are shown here along with definitions and examples is available. The 66 resources were grouped into 16 categories under 6 major headings.

Major heading	n	Category	n	Resource Names	Definition	Detailed Examples	Comments
Application and support of clinical and translational research	1	**Research/Regulatory Compliance**	**1**	Conflict of Interest	Informatics systems to capture and archive workforce conflict of interest		
			2	Electronic IRB	Support IRB operations and/or eIRB interfaces		
			3	Consent	Centralized consent repository, e-consent model, research contact permission, biobank consents		
			4	CT.gov registration process	Services for registration with ClinicalTrials.gov		
			5	Public Access compliance tracking	Services for monitoring that investigators are in compliance with public access policies for publications		
	2	**Service Request/Fulfillment**	**6**	Service request system	Centralized system for capturing and fulfilling researcher needs	REDCap+API, SPARCrequest, other ticketing systems (e.g. Service Now, Kayako), WebCAMP, Jira	
			7	Resource navigation and inventory	Web-based listing of resources, including ontology based systems	eagle-i, NUCore	
			8	Service fulfillment system	Tracking of fulfillment and status	SPARCrequest, REDCap+API, other ticketing system, NUCore, Taskmanager (for EDW reports and data steward approvals)	
	3	**Program Evaluation**	**9**	Citation Capture and Service	systems for tracking citation based metrics	WebCAMP	Bill Trochim's group
			10	Fulfillment Attribution	Fulfillment metrics dashboard	SPARCrequest, other	
	4	**Grants and Contracts Systems**	**11**	Electronic Grants and Contracts System	systems for tracking grant applications, funding of faculty...	Coeus, Click (Huron) products	usually managed by office of vice-chancellor. Sometimes under research informatics, Childern's national: click product (al least API access is managed by Informatics)
			12	CTSA pilot grants	System for pilot grant applications, vouchers	NU nitro competitions, UNC foundant, MUSC appsite, Vand Starbrite, Webcamp (e.g. Indiana), Childern's national: click product	
	5	**CTMS components**	**13**	Clinical Research Budgeting	Tools to help investigators with research charge capture and billing	Oncore, SPARCrequest, other	Building a budget distringuishing between research and standard of care in your protocol
			14	Participant Payment Model	Tracking patient payements for participation in clinical trials	Nimblify	Remuneration, E.g. Single visit or multi-visit study compensation
			15	Billing compliance	Adding layers/tools to enforce compliance in clinical billing systems	Oncore at Yale, SPARCrequest MUSC	may include interfaces with EHR (Epic); note that the significant manual effort is done by billing departments to avoid in appropriate billing especially when a direct feed from the CTMS is not provided
			16	Adverse events reporting	reporting and DSM review	Most CTMS's	
	6	**Electronic Data Capture**	**17**	Investigator Initiated Studies	Tools to enable data capture associated with small studies, including support for case report form design.	E.g. Case report forms design (e.g. REDCap and OpenClinica/Oncore more controlled and 21CFR11)	single group / investigators
			18	Multicenter studies	Systems for collecting or managing research data as part of multi-site study coordination.	E.g. Clinical Trial coordinating centers	multisite studies
			19	Large studies	For very large research studies or networks, systems for data capture and integration at scale including those collected from multiple modalities (e.g. EMR, fitbit, PROs,...)	E.g. trials conducted through large networks like PCORnet	
			20	21CFR11 support	Services for technical compliance and documentation for 21CFR11 compliance and FDA audits	e.g. in CTMS or dedicated REDCap instance	
			21	Patient Reported Outcomes (PRO)	systems to capture report of the status of a patient's health/condition that comes directly from the patient	PROMIS, REDCap support, interface with servers	Note: special considerations when PROs are captured through the EMR
			22	Mobile app support	Supporting EDC on mobile platforms		
	7	**Biobanking systems**	**23**	Biobank or biorepository management systems	systems for specimen tracking, storage, retrieval.	e.g. Labvantage, caTissue, others	
	8	**Data Repositories and EHR data**	**24**	Cohort exploration tools (self-service)	Tools that allow users to directly interface with the EHR data in a de-identified aggregate data manner and allows them to explore cohorts of patients before IRB approval for possible future recruitment or chart reviews in IRB approved protocols.	E.g. EDW or IDRs for cohort identification, including i2b2 or Deduce (Duke?), BioVU?	
			25	IDR navigation/honest broker services	Tools and workflow to allow reseachers request identified data from IDR or DW administrators for IRB approved studies or for complex de-identified queries including query tools		
			26	Analytics services	Concierge analytics or reusable libraries customized to your data store		
			27	Study specific integrated data	Tools and personnel to support study specific integrated data repositories such as disease registries for research.	E.g. custom registries, advanced search mechanisims, dedicated personnel, may include searchers across multiple data sources e.g. biobanks, imaging data	
			28	Big data storage	storage infrastructure	e.g. hadoop, spark, Greenplum, HAWQ	Interfacing (ETL, EL), Analysis tools (SAS, R), Visualization tools (QlikView, Tableau, BO...
			29	Big data interfaces	ETL, EL		
			30	Analysis tools	Tools for analysis and analytics for investigators to use.	SAS, R, ...	

			31	Visualization tools	Tools for visualizing data from either big data platforms or data warehouses	QlikView, Tableau, BO...	
			32	Molecular Data Set	Next gen sequencing (NGS) or genomic data with requisite safeguards		
			33	Imaging Data Set	archival data, usally managed by imaging cores	e.g. At Indiana XNAT research open source image management system for radiology	
			34	Public Health Data Set	Access, navigation, analysis capacity to large public datasets	e.g. HCUP	
			35	Environmental Data Set	...		
	9	**Clinical Medical Information System (EHR systems research interface)**	36	Research Related Decision Support		E.g. PGx, interventional studies using EMRs	
			37	Recruitment	Alerts to recruit patients into ongoing studies	e.g powertrials in Cerner e.g. Indiana and Children's	
			38	Research that utilizes the EMR	Development of research functionalities (alerts, decision support, research data collection tools)		
			39	Interfaces with EHR	Implementation of interfaces from and to research systems such as CTMS, EDC, IRB		
	10	**Communication**	40	Content collaboration	e.g. Slack (like REDDIT for researchers or stack overflow) Tiaga: Conban; Confluence wiki		
			41	Project management	Systems for managing projects, tracking progress, and tickets	Tiaga: Conban; Jira; Confluence	
			42	Information/Service Portal	Researcher portals, service navigation		
			43	Research Networking	Tools that enable allow researcher to create online bios and users to discover research expertise, identify potential collaborators or mentors, and assemble teams of collaborators.	e.g. VIVO, Profiles, Elsivier Pure	
			44	Data publishing and data sharing plans			
Research collaboration		**Extramural data collaborations**	1	Resources for participating in large networked collaborations	The technical and human resources required for participated in large networked collaborations such as clinical research data networks (CDRNs) or clinical trial recruitment networks. This also includes the ticketing and support groups to triage, prioritize, and approve such research projects.	E.g. TriNetX, SHRINE, PCORnet (i2b2, popmednet), Flatiron, Google,...	Technical infrastructure requirements are obvious: developers, servers, ... Non technical or personnel resources: for example project managers are needed to track that the components are in place and who would track all inbound data sharing requests to shepherd them through the governance process. Another example is time spent tracking and seeing business associate agreements for data sharing.
			2	Back-end	Building and maintaining components of the enterprise architecture to readily support extra mural collaborations. These components could include technical components (i2b2) or investments in converting native data to reference terminologies or data exchange standards.	PCORnet CDM, i2b2 marts, OMOP CDM	Data analyst or DBA time that would need be dedicated to maintaining functional data marts.
			3	Front-end provider facing	Implementing provider-facing interventions that are requirements for participating in large collaborations.	Multi-site pragmatic trial or decision support trial	Epic resources. QA and testing. Training material. Feedback and approval from resource utilization committees, e.g. committees that oversee EMR decision support.
			4	Front-end patient facing?	Implementing patient-facing interventions or interfaces that requirements for participating in large collaborations	When a healthcare enterprise partners with patient advocacy group or participates in a large national cohort recruitment effort like the PMI	Epic or patient portal resources. Regulatory and legal compliance and verification.
Cyberinfrastructure		**Security**	1	People/documentation/Training	E.g. CISO, IT security team, scanning software, providing documentation,		
			2	Protecting privacy	Honest brokering, encryption, user rights		
			3	Server security	Encryption, network segmentation, technical controls		
			4	FISMA compliance	Other regs?		
		IT infrastructure	5	Servers			
			6	Software licenses			
			7	Networks			
Oversight and governance		**Governance**	1	Standing IT governance committees or steering committees	Resources needed to ensure that staff with informatics knowledge and expertice can provide standing or ad hoc consultation and support for IT and Informatics governing bodies within the organization. This also includes time spent drafting and reviewing policies and SOPs for enforcement of compliance with policies.	e.g. EDW governance board, encryption and network firewall policies, appropriating tiered support to various campus groups, SOPs for security breach	
			2	Regulatory operational support	The resources (technical or human) needed to enforce operational aspects of policies and regulations. These could include digital workflow support, audit, or approval components.	e.g. data release approval mechanisms. e.g. some organizations may require that all REDCap projects requests need to be approved on a per-project basis, or that their data elements need to be audited to verify adherence to the HIPAA release authorization from the consent documents	
Training and support		**Education**	1	Seminars (Top Down?)	Workshops, symposia, and certificate programs in informatics and related competencies		
			2	Courses	In person or online courses in informatics and related competencies	Online courses could include MOOC or in Moodle or other learning management systems.	

			3	In-app video training	Reference and educational content intended to be displayed in context of informatics systems	e.g. helper text (like text that appears when you hober over a question mark). How-tos ad FAQs. Includes text and multimedia. Reference to policies, regulations like explanation of HIPAA identifiers or Human Subjects Research.	
			4	Regulatory training	Development of content for regulatory training as well as the infrastructure to administer, certify, and document training by organizational staff.	e.g. CITI and GCP training. Integration with IRB systems or CTMS	
			5	One on one (Bottom up?)	Educational media and resources developed for one-on-one training and support		
Methodological Research & Innovation		**Informatics innovation**	1	Faculty	Resources committed to attract, employ and retain faculty who specialize in applied or foundational informatics methods.		
			2	Student pipeline	Resources committed to establish and sustain degree or other training programs		
			3	Software engineers/professional staff	Investments in incentives and benefits to attract and retain highly skilled informatics professional staff	e.g. Epic developers are at a premium, bioinformatics or data scientists who receive very attractive financial offers from industry	Todo: look for references quantifying the salary differentials and labor market attractiveness outside academia
			4	Support for rapid prototyping and implementation.	Create and sustain infrastucture that is easily accessible to informatics professionals for rapid prototyping and evaluation of novel methods and systems with the intent of rapid agile deployment into enterprise-wide use. This could exist alongside or within the production systems that support the operations of an academic medical center.	e.g. access to EMR for testing of pharmacogenomic or novel predictive modeling in pilot areas.	
		TOTAL:	**66**				

Supplementary Figure 1: Correlations between responses.



Q1 = Regulatory Compliance
Q2 = Service Request
Q3 = Program Evaluation
Q4 = Grants and Contracts
Q5 = CTMS
Q6 = Electronic Data Capture
Q7 = Biobanking systems
Q8 = Data Repositories and EHR data
Q9 = EHR systems research interface
Q10 = Communication
Q11 = Extramural collaborations
Q12 = Security
Q13 = IT infrastructure
Q14 = Governance resources
Q15 = Education and training
Q16 = Informatics research and innovation
L = Locus
 L_Inf = Informatics
 L_Res = Research Office
 L_it = IT
 L_oth = Other
S = Sust
 S_inst = Institutional
 S_fee = Fee−for−service
 S_grts = Grants
 S_oth = Other support

Note: S_oth correlations are removed for simplicity.

Supplementary Tables (#2): includes correlation data, and frequencies of combinations of responses within each category for all 16 questions.

Legend

Q1 = Regulatory Compliance
Q2 = Service Request
Q3 = Program Evaluation
Q4 = Grants and Contracts
Q5 = CTMS
Q6 = Electronic Data Capture
Q7 = Biobanking systems
Q8 = Data Repositories and EHR data
Q9 = EHR systems research interface
Q10 = Communication
Q11 = Extramural collaborations
Q12 = Security
Q13 = IT infrastructure
Q14 = Governance resources
Q15 = Education and training
Q16 = Informatics research and innovation

Abbr	Description	
L_Inf	Locus	Informatics
L_Res	Locus	Research Office
L_it	Locus	IT
L_oth	Locus	Other
S_inst	Sustainabili	Institutional
S_fee	Sustainabili	Fee-for-service
S_grts	Sustainabili	Grants
S_oth	Sustainabili	Other support

Sheet 2: Raw data of responses.
Sheet 3: Correlation data sorted in descending order. Filtered to results within the same component. S_oth correlations filtered out for simplicity.
Sheets 4 onward show frequencies of combinations of responses within each category for all 16 categories.

id	Q1_L_Inf	Q1_L_Res	Q1_L_it	Q1_L_oth	Q1_S_inst	Q1_S_fee	Q1_S_grts
1	1	0	0	0	1	0	1
2	1	1	1	1	1	1	1
3	0	1	0	0	1	0	0
4	0	1	0	0	1	0	0
5	0	1	1	0	1	0	0
8	1	1	0	0	1	0	1
9	0	0	1	0	1	0	0
10	0	1	1	0	1	0	0
11	1	1	0	1	1	1	0
12	0	1	1	0	1	0	0
13	0	1	0	0	1	0	0
15	0	1	0	0	1	1	0
16	1	1	1	0	1	0	1
17	1	0	0	1	1	1	1
18	0	1	0	0	1	0	0
21	0	1	0	0	1	0	0
22	1	1	0	1	1	1	1
23	1	1	1	0	1	0	0
28	0	1	0	0	1	0	0
30	1	1	1	0	1	1	1
32	0	0	1	0	1	0	0
33	0	1	0	0	1	0	0
36	0	1	0	0	1	0	0
41	1	1	1	1	1	1	1
42	1	1	0	0	1	0	0
45	0	1	0	0	1	0	0
46	0	0	0	1	1	0	0
47	0	1	1	0	1	0	0
53	1	1	0	1	1	0	1
54	0	1	0	1	1	0	1
56	0	1	0	0	1	0	0
57	0	1	1	0	1	1	0
58	0	1	0	0	1	0	0
59	0	1	1	0	1	0	0
65	0	1	1	0	1	1	1
69	0	1	0	0	1	0	0

Correlation data sorted in descending order. Filtered to results within the same component. S_oth correlations filtered out

v1	v2	corr	p
1-Regulatory Compliance_L_Inf	1-Regulatory Compliance_S_grts	0.65	3.2E-06
11-Extramural collaborations_L_Inf	11-Extramural collaborations_S_grts	0.632118072	7.1E-06
3-Program Evaluation_L_Res	3-Program Evaluation_S_inst	0.581176471	5.4E-05
13-IT infrastructure_L_Inf	13-IT infrastructure_S_grts	0.572077554	7.6E-05
16-Informatics research and innovation_L_Inf	16-Informatics research and innovation_S_grts	0.570610361	8E-05
9-EHR systems research interface_L_Inf	9-EHR systems research interface_S_fee	0.547722558	0.00017
12-Security_L_Inf	12-Security_S_grts	0.545086545	0.00019
4-Grants and Contracts _L_Inf	4-Grants and Contracts _S_grts	0.544949261	0.00019
7-Biobanking systems_L_Inf	7-Biobanking systems_S_inst	0.508086778	0.00059
5-CTMS_L_Inf	5-CTMS_S_fee	0.495968799	0.00084
9-EHR systems research interface_L_Inf	9-EHR systems research interface_S_grts	0.484071217	0.00116
10-Communication_L_Inf	10-Communication_S_grts	0.48121774	0.00125
2-Service Request_L_it	2-Service Request_S_inst	0.473432076	0.00154
3-Program Evaluation_L_oth	3-Program Evaluation_S_grts	0.45344929	0.00256
11-Extramural collaborations_L_it	11-Extramural collaborations_S_inst	0.444675866	0.00317
1-Regulatory Compliance_L_Inf	1-Regulatory Compliance_L_oth	0.440385506	0.00352
1-Regulatory Compliance_L_oth	1-Regulatory Compliance_S_grts	0.440385506	0.00352
15-Education and training_L_Res	15-Education and training_S_inst	0.428174419	0.00467
4-Grants and Contracts _L_Res	4-Grants and Contracts _S_inst	0.423586871	0.00519
11-Extramural collaborations_L_Res	11-Extramural collaborations_S_inst	0.40824829	0.00728
5-CTMS_L_Inf	5-CTMS_S_grts	0.407899863	0.00733
12-Security_L_Inf	12-Security_S_fee	0.387298335	0.01128
9-EHR systems research interface_L_it	9-EHR systems research interface_S_inst	0.368629908	0.0163
11-Extramural collaborations_L_it	11-Extramural collaborations_S_fee	0.358609569	0.0197
9-EHR systems research interface_L_it	9-EHR systems research interface_L_Res	0.350823208	0.02273
1-Regulatory Compliance_L_oth	1-Regulatory Compliance_S_fee	0.348792843	0.02358
1-Regulatory Compliance_L_Inf	1-Regulatory Compliance_S_fee	0.342493873	0.0264
1-Regulatory Compliance_S_fee	1-Regulatory Compliance_S_grts	0.342493873	0.0264
3-Program Evaluation_L_it	3-Program Evaluation_L_Res	0.336336397	0.02942
12-Security_L_Inf	12-Security_L_Res	0.334719341	0.03026
12-Security_S_fee	12-Security_S_grts	0.333333333	0.03099
13-IT infrastructure_L_oth	13-IT infrastructure_S_fee	0.324442842	0.03606
1-Regulatory Compliance_L_Res	1-Regulatory Compliance_S_inst	0.321960458	0.03759
8-Data Repositories and EHR data_L_Inf	8-Data Repositories and EHR data_S_grts	0.321960458	0.03759
3-Program Evaluation_L_Inf	3-Program Evaluation_L_it	0.320256308	0.03867
8-Data Repositories and EHR data_S_fee	8-Data Repositories and EHR data_S_grts	0.315063019	0.04212
9-EHR systems research interface_S_fee	9-EHR systems research interface_S_grts	0.303802497	0.05047
14-Governance resources_L_Inf	14-Governance resources_S_grts	0.3	0.05357
12-Security_L_Res	12-Security_S_grts	0.298556197	0.05479
16-Informatics research and innovation_S_fee	16-Informatics research and innovation_S_grts	0.28894889	0.06347
10-Communication_L_it	10-Communication_S_inst	0.288675135	0.06373
10-Communication_L_oth	10-Communication_S_fee	0.284267622	0.06807
3-Program Evaluation_L_Inf	3-Program Evaluation_S_grts	0.283069259	0.0693
12-Security_L_Res	12-Security_S_fee	0.282842712	0.06953

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	1
0	1	0	0	16
1	1	0	0	2
0	0	1	0	4
1	0	1	0	0
0	1	1	0	7
1	1	1	0	3
0	0	0	1	2
1	0	0	1	1
0	1	0	1	1
1	1	0	1	3
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	2

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	0
1	0	0	0	25
0	1	0	0	0
1	1	0	0	5
0	0	1	0	1
1	0	1	0	5
0	1	1	0	0
1	1	1	0	5
0	0	0	1	0
1	0	0	1	0
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	1

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	1
1	0	0	0	15
0	1	0	0	1
1	1	0	0	2
0	0	1	0	1
1	0	1	0	7
0	1	1	0	0
1	1	1	0	3
0	0	0	1	3
1	0	0	1	4
0	1	0	1	2
1	1	0	1	0
0	0	1	1	0
1	0	1	1	2
0	1	1	1	0
1	1	1	1	1

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	7
0	1	0	0	2
1	1	0	0	3
0	0	1	0	7
1	0	1	0	5
0	1	1	0	3
1	1	1	0	14

Sustainability Sources

Informatics	Research	Offi	IT	Other	Freq
0	0		0	0	2
1	0		0	0	5
0	1		0	0	8
1	1		0	0	4
0	0		1	0	0
1	0		1	0	0
0	1		1	0	0
1	1		1	0	3
0	0		0	1	13
1	0		0	1	5
0	1		0	1	1
1	1		0	1	1
0	0		1	1	0
1	0		1	1	0
0	1		1	1	0
1	1		1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	2
1	0	0	0	13
0	1	0	0	0
1	1	0	0	0
0	0	1	0	13
1	0	1	0	11
0	1	1	0	1
1	1	1	0	0
0	0	0	1	0
1	0	0	1	1
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	1
1	1	1	1	0

Sustainability Sources

Informatics	Research	Offi	IT	Other	Freq
0	0		0	0	1
1	0		0	0	1
0	1		0	0	16
1	1		0	0	5
0	0		1	0	2
1	0		1	0	0
0	1		1	0	7
1	1		1	0	1
0	0		0	1	2
1	0		0	1	0
0	1		0	1	4
1	1		0	1	0
0	0		1	1	3
1	0		1	1	0
0	1		1	1	0
1	1		1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	29
0	1	0	0	0
1	1	0	0	3
0	0	1	0	2
1	0	1	0	4
0	1	1	0	0
1	1	1	0	1
0	0	0	1	0
1	0	0	1	0
0	1	0	1	0
1	1	0	1	0
0	0	1	1	1
1	0	1	1	1
0	1	1	1	0
1	1	1	1	0

Sustainability Sources

Informatics	ResearchOffice	IT	Other	Freq
0	0	0	0	0
1	0	0	0	5
0	1	0	0	7
1	1	0	0	4
0	0	1	0	1
1	0	1	0	1
0	1	1	0	5
1	1	1	0	5
0	0	0	1	7
1	0	0	1	0
0	1	0	1	1
1	1	0	1	1
0	0	1	1	0
1	0	1	1	2
0	1	1	1	1
1	1	1	1	2

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	20
0	1	0	0	1
1	1	0	0	6
0	0	1	0	1
1	0	1	0	6
0	1	1	0	0
1	1	1	0	4
0	0	0	1	1
1	0	0	1	0
0	1	0	1	0
1	1	0	1	2
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	0

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	19
0	1	0	0	0
1	1	0	0	2
0	0	1	0	2
1	0	1	0	6
0	1	1	0	0
1	1	1	0	3
0	0	0	1	1
1	0	0	1	4
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	4
0	1	1	1	0
1	1	1	1	1

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	2
1	0	0	0	7
0	1	0	0	5
1	1	0	0	4
0	0	1	0	3
1	0	1	0	8
0	1	1	0	2
1	1	1	0	10
0	0	0	1	0
1	0	0	1	0
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	1

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	2
1	0	0	0	11
0	1	0	0	5
1	1	0	0	2
0	0	1	0	4
1	0	1	0	3
0	1	1	0	2
1	1	1	0	3
0	0	0	1	9
1	0	0	1	0
0	1	0	1	1
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	10
0	1	0	0	3
1	1	0	0	4
0	0	1	0	2
1	0	1	0	9
0	1	1	0	1
1	1	1	0	8
0	0	0	1	2
1	0	0	1	0
0	1	0	1	1
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	1

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	9
0	1	0	0	0
1	1	0	0	3
0	0	1	0	0
1	0	1	0	19
0	1	1	0	0
1	1	1	0	7
0	0	0	1	0
1	0	0	1	1
0	1	0	1	0
1	1	0	1	0
0	0	1	1	1
1	0	1	1	2
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	5
0	1	0	0	0
1	1	0	0	2
0	0	1	0	0
1	0	1	0	12
0	1	1	0	2
1	1	1	0	18
0	0	0	1	0
1	0	0	1	0
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	2

Sustainability Sources

Informatics	ResearchOffice	IT	Other	Freq
0	0	0	0	1
1	0	0	0	9
0	1	0	0	0
1	1	0	0	0
0	0	1	0	5
1	0	1	0	11
0	1	1	0	2
1	1	1	0	5
0	0	0	1	3
1	0	0	1	3
0	1	0	1	0
1	1	0	1	0
0	0	1	1	1
1	0	1	1	2
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	12
0	1	0	0	2
1	1	0	0	3
0	0	1	0	3
1	0	1	0	6
0	1	1	0	0
1	1	1	0	11
0	0	0	1	1
1	0	0	1	0
0	1	0	1	0
1	1	0	1	0
0	0	1	1	1
1	0	1	1	0
0	1	1	1	0
1	1	1	1	2

Sustainability Sources

Informatics	ResearchOffice	IT	Other	Freq
0	0	0	0	1
1	0	0	0	8
0	1	0	0	6
1	1	0	0	6
0	0	1	0	4
1	0	1	0	6
0	1	1	0	1
1	1	1	0	1
0	0	0	1	2
1	0	0	1	2
0	1	0	1	1
1	1	0	1	2
0	0	1	1	1
1	0	1	1	1
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	2
1	0	0	0	19
0	1	0	0	0
1	1	0	0	2
0	0	1	0	4
1	0	1	0	10
0	1	1	0	0
1	1	1	0	3
0	0	0	1	0
1	0	0	1	1
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	1

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	17
0	1	0	0	1
1	1	0	0	5
0	0	1	0	0
1	0	1	0	7
0	1	1	0	1
1	1	1	0	6
0	0	0	1	1
1	0	0	1	2
0	1	0	1	0
1	1	0	1	1
0	0	1	1	1
1	0	1	1	0
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	0
1	0	0	0	2
0	1	0	0	1
1	1	0	0	2
0	0	1	0	10
1	0	1	0	9
0	1	1	0	5
1	1	1	0	10
0	0	0	1	0
1	0	0	1	0
0	1	0	1	0
1	1	0	1	0
0	0	1	1	2
1	0	1	1	1
0	1	1	1	0
1	1	1	1	0

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	1	0	15
1	0	1	0	12
0	1	1	0	2
1	1	1	0	9
0	0	1	1	1
1	0	1	1	2
0	1	1	1	0
1	1	1	1	1

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	0
1	0	0	0	23
0	1	0	0	0
1	1	0	0	2
0	0	1	0	0
1	0	1	0	10
0	1	1	0	0
1	1	1	0	4
0	0	0	1	1
1	0	0	1	1
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	1

Sustainability Sources

Informatics	ResearchOffice	IT	Other	Freq
0	0	1	0	17
1	0	1	0	20
0	1	1	0	1
1	1	1	0	0
0	0	1	1	2
1	0	1	1	2
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	11
0	1	0	0	0
1	1	0	0	8
0	0	1	0	0
1	0	1	0	9
0	1	1	0	1
1	1	1	0	11
0	0	0	1	0
1	0	0	1	0
0	1	0	1	0
1	1	0	1	1
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	0

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	2
0	1	0	0	2
1	1	0	0	1
0	0	1	0	7
1	0	1	0	8
0	1	1	0	3
1	1	1	0	12
0	0	0	1	1
1	0	0	1	0
0	1	0	1	0
1	1	0	1	1
0	0	1	1	2
1	0	1	1	1
0	1	1	1	0
1	1	1	1	2

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	2
1	0	0	0	27
0	1	0	0	0
1	1	0	0	1
0	0	1	0	0
1	0	1	0	9
0	1	1	0	0
1	1	1	0	1
0	0	0	1	1
1	0	0	1	1
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	0
0	1	1	1	0
1	1	1	1	0

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	11
0	1	0	0	2
1	1	0	0	9
0	0	1	0	0
1	0	1	0	4
0	1	1	0	0
1	1	1	0	6
0	0	0	1	1
1	0	0	1	3
0	1	0	1	0
1	1	0	1	1
0	0	1	1	0
1	0	1	1	1
0	1	1	1	0
1	1	1	1	4

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	1
1	0	0	0	14
0	1	0	0	0
1	1	0	0	1
0	0	1	0	2
1	0	1	0	14
0	1	1	0	1
1	1	1	0	3
0	0	0	1	1
1	0	0	1	2
0	1	0	1	1
1	1	0	1	0
0	0	1	1	0
1	0	1	1	2
0	1	1	1	0
1	1	1	1	0

Sustainability Sources

Informatics	ResearchOffi	IT	Other	Freq
0	0	0	0	0
1	0	0	0	22
0	1	0	0	0
1	1	0	0	3
0	0	1	0	0
1	0	1	0	8
0	1	1	0	0
1	1	1	0	0
0	0	0	1	4
1	0	0	1	2
0	1	0	1	0
1	1	0	1	1
0	0	1	1	1
1	0	1	1	1
0	1	1	1	0
1	1	1	1	0

Locus of Control

Institutional	Fees	Grants	Other	Freq
0	0	0	0	3
1	0	0	0	4
0	1	0	0	0
1	1	0	0	0
0	0	1	0	6
1	0	1	0	15
0	1	1	0	3
1	1	1	0	7
0	0	0	1	0
1	0	0	1	1
0	1	0	1	0
1	1	0	1	0
0	0	1	1	0
1	0	1	1	2
0	1	1	1	1
1	1	1	1	0

Sustainability Sources