Commonwealth of Massachusetts Center for Health Information & Analysis (CHIA) Non-Governmental Application for Case Mix Data

This form is required by all Applicants, except Government Agencies as defined in <u>957 CMR 5.02</u>. All Applicants must also complete the Data Management Plan, attached to this Application. The Application and the <u>Data Management Plan</u> must be signed by an authorized signatory of the organization. This Application and the Data Management Plan will be used by CHIA to determine if your organization may receive CHIA data. Please be sure the documents are completed fully and accurately. You may wish to consult the Evaluation Guide that CHIA will use to review your documents. Prior to receiving CHIA Data, the organization must execute the <u>Data Use Agreement</u>. You may wish to review that document as you complete these forms.

<u>NOTE</u>: In order for your application to be processed, you must submit the required application fee. Please consult the fee schedule for the appropriate fee amount. A <u>remittance form</u> with instructions for submitting the application fee is available on the CHIA website.

All attachments must be uploaded to IRBNet with your Application. All applications documents can be found on the <u>CHIA website</u> in Word and/or PDF format.

I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	Scott Mullins
Title:	VP, Product Development, Intalere
	Executive Director, DataBay Resources
Organization:	DataBay Resources, a wholly-owned subsidiary of Intalere (formerly Amerinet)
Project Title:	MA Case Mix 2014 for DataBay
IRBNet ID:	757381-1
Mailing Address:	100 Global View Drive, Suite 300, Warrendale, PA 15086
Telephone Number:	724-772-7329
Email Address:	Scott.Mullins@Intalere.com
Names of Co-Investigators:	Joanne Sarachine
Email Addresses of Co-Investigators:	SarachiJ@databayresources.com
Original Data Request Submission Date:	6-15-15
Dates Data Request Revised:	7-27-15 and 10-26-15 and 6-30-16
Project Objectives (240 character limit):	Purchase MA FY2012 and FY2014 OutPt Observation Case Mix Data
	Purchase MA FY2014 & FY2015 Inpatient, OP
	Observation & Emergency Case Mix Data.
Project Research Questions (if applicable) Business Use Case(s):	N/A

II. PUBLIC INTERST & PROJECT SUMMARY

1. Briefly explain why completing your project is in the public interest.

DataBay's Navigate is an online tool used by Massachusetts Hospitals strategic and medical staff planning and was previously approved for FY2013 level 2 data. Navigate allows healthcare facilities to produce reports based on selected parameters such as zip codes, service lines and hospitals. These include Market Share reports and benchmarking reports. (see Attachment 1-Sample Reports and Attachment 2-Purpose and Intended Use).
Our tools help hospitals and healthcare in general have a better understanding of patients and their market so that they can make better decisions. This understanding provides them evidence-based support that they can use with their regional health partnerships, community programs and various public health initiatives.

Has an Institutional Review Board (IRB) reviewed your project	2.	Has an	Institutional	Review	Board	(IRB)	reviewed	your	project
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- ☐ Yes, a copy of the approval letter and protocol must be attached to this Application
- ⊠ No, this project is not human subject research and does not require IRB review.
- 3. If your project has not been reviewed by an IRB, please attach a brief (1-2 page) description of your project including the methodology, objectives, and research questions.
- III. DATA FILES REQUESTED [Applicants seeking 2015 data only should skip to Question 2]
- 1. <u>FY 2004 2014 Data</u>: Please indicate the Case Mix files from which you seek data, the Level(s), the year(s) of data requested, and your justification for requesting <u>each</u> file. Please refer to the <u>Case Mix Data Specifications</u> for details of the file contents.

CASE MIX FILES	Levels 1 – 6	Years Available 2004 - 2014
Inpatient Discharge	□ Level 1 – 3 Digit Zip Code	Year(s) of Data Requested:
	 ☑ Level 2 – Unique Physician Number (UPN) + 5 Digit Zip Code ☐ Level 3 – Unique Health Information Number (UHIN) ☐ Level 4 – UHIN and UPN ☐ Level 5 – Date(s) of Admission; Discharge; Significant Procedures ☐ Level 6 – Date of Birth; Medical Record Number; Billing Number PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL: DBR reports aggregate at a five-digit zip code. Also, hospitals use physician information for strategic planning and medical staff planning. 	FY2014
Outpatient	□ Level 1 – 3 Digit Zip Code	Year(s) of Data Requested:
Observation	 ☑ Level 2 – Unique Physician Number (UPN) ☐ Level 3 – Unique Health Information Number (UHIN) 	FY2012
	□ Level 4 – UHIN and UPN □ Level 5 – Date(s) of Admission; Discharge; Significant Procedures	<u>&</u>
	☐ Level 6 – Date of Birth; Medical Record Number; Billing Number PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE	<u>FY2014</u>

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CHOSEN LEVEL: DBR reports aggregate at a five-digit zip code. Also, hospitals use physician information for strategic planning and medical staff planning.	
☐ Level 1 – 3 Digit Zip Code	Year(s) of Data Requested:
⊠Level 2 – Unique Physician Number (UPN)	
□ Level 3 – Unique Health Information Number (UHIN) □ Level 4 – UHIN and UPN □ Level 5 – Date(s) of Admission; Discharge; Significant Procedures □ Level 6 – Date of Birth; Medical Record Number; Billing Number	<u>FY2014</u>
CHOSEN LEVEL: DBR reports aggregate at a five-digit zip code. Also, hospitals use physician information for strategic planning and medical staff planning.	
	DBR reports aggregate at a five-digit zip code. Also, hospitals use physician information for strategic planning and medical staff planning. □ Level 1 − 3 Digit Zip Code □ Level 2 − Unique Physician Number (UPN) □ Level 3 − Unique Health Information Number (UHIN) □ Level 4 − UHIN and UPN □ Level 5 − Date(s) of Admission; Discharge; Significant Procedures □ Level 6 − Date of Birth; Medical Record Number; Billing Number PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL: □ DBR reports aggregate at a five-digit zip code. Also, hospitals use physician information for strategic planning and medical staff

2. <u>FY 2015 Data</u>: Beginning with ficsal year 2015, Massachusetts Acute Care Hospital and Case Mix and Charge Data (collectively Case Mix Data) are released in **Limited Data Set (LDS) files**. Please refer to the <u>Case Mix Data Specifications</u> for details of the file contents.

Please indicate the Case Mix files from which you seek data, the year(s) of data requested, and your justification for requesting <u>each</u> file.

CASE MIX LIMITED DATA SET FILES	Year(s) Of Data Requested Current Yrs. Available ☑ 2015
☑ Inpatient Discharge CY2015	Please describe how your research objectives require Inpatient Discharge data: Our tools help hospitals and healthcare in general have a better understanding of patients and their market so that they can make better decisions. This understanding provides them evidence-based support that they can use with their regional health partnerships, community programs and various public health initiatives. By use of historical healthcare resources of inpatient discharges for benchmarking, hospitals will have more complete data reporting and analysis are vital tools in determining better methods to serve as a baseline of health status in a given community and to plan social and medical interventions relevant to the population. This ensures that community benefit programs and resources are focused on the most significant health needs.
○ Outpatient Observation CY2015	Please describe how your research objectives require Outpatient Observation data: Our tools help hospitals and healthcare in general have a better understanding of patients and their market so that they can make better decisions. This understanding provides them evidence-based support that they can use with their regional health partnerships, community programs and various public health initiatives. By use of historical healthcare resources of outpatient events for benchmarking, hospitals will have more complete data reporting and analysis are vital tools in determining better methods to serve as a baseline of health status in a given

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	community and to plan social and medical interventions relevant to the population. This ensures that community benefit programs and resources are focused on the most significant health needs.
	Please describe how your research objectives require Emergency Department data: Our tools help hospitals and healthcare in general have a better understanding of
CY2015	patients and their market so that they can make better decisions. This understanding provides them evidence-based support that they can use with their regional health partnerships, community programs and various public health initiatives. By use of historical healthcare resources of emergency events for benchmarking, hospitals will have more complete data reporting and analysis are vital tools in determining better methods to serve as a baseline of health status in a given community and to plan social and medical interventions relevant to the population. This ensures that community benefit programs and resources are focused on the most significant health needs.

Sections IV-IX must be completed by all Applicants requesting 2015 data. Applications that only include requests for prior years of data can skip to Section X.

IV. GEOGRAPHIC DETAIL

Please choose <u>one</u> of the following geographic options for MA residents:

☐ 3 Digit Zip Code	☐ 3 Digit Zip Code &	□ 5 Digit Zip Code ***	☐ 5 Digit Zip Code &
(Standard)	City/Municipality ***	100	City/Municipality ***

***Please provide justification for the chosen level of geographic detail if requesting something other than 3-Digit Zip Code only. Refer to specifics in your methodology:

DataBay Resources reports aggregate data at a five-digit zip code for the state data sets that we currently utilize. Hospitals using the aggregated data use this information for strategic planning and medical staff planning. This is the level that our software uses the data so that hospitals can compare and trend for benchmarking purposes. No patient level data is shown; only aggregate data. Access to run the tool is restricted to authorized users that require a logon user ID and password. Any use of data in a report within our application adheres to cell size suppression policy.

Hospitals/health systems use aggregate data to identify where patients come from based on ZIP code or county residence. DataBay Resources utilizes a data warehouse featuring multiple inpatient and ambulatory state databases. Larger geographic areas using only 3 digits would produce misleading results and cause hospitals/healthcare systems to make inaccurate decisions. This additional information allows the user to perform research and to analyze and evaluate critical matters such as market share.

Hospitals/health systems use their service areas to determine a hospital's relative position among other facilities within their service area and reveal opportunities for growth. This determines the viability of planned new service line offerings and a better understanding of their service areas and community health needs for strategic planning.

Our tools help hospitals and healthcare in general to have a better understanding of patients and their market so that they can make better decisions. This knowledge also provides the ability to use the analysis of the data to do strategic planning for insight into best practices, improved processes, quality outcomes and continuous improvement of healthcare.

V. DEMOGRAPHIC DETAIL

Please choose one of the following demographic options:

power commence of the commence			
☐ Not Requested (Standard)		⊠ Race & Ethnicity***	
*** If requested please, provide justification for requesting Race and Ethnicity. Refer to specifics in your			
methodology:			
DataBay Resources using aggregate	data based on race e	nable hospitals/hea	althcare systems to use the data for strategic
planning and medical staff planning.	•		
The data is aggregated based on rac	e so that hospitals ca	in compare and tren	nd for benchmarking purposes. No patient
			to authorized users that require a logon
			heres to cell size suppression policy.
aser is and passivera. They ase or a	ata in a report mini	. ост аррисаети	·····
VI. DATE DETAIL			
Please choose <u>one</u> option from the f	following ontions for	dates:	
riease choose <u>one</u> option from the r	ollowing options for	uates.	
[] V (\0000\(\0000\(\0000\)	NA + I- (V) (V) (NA N	4) ***	☐ Doy (\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
☐ Year (YYYY)(Standard)	☐ Month (YYYYMN	(1)	☐ Day (YYYYMMDD)***
	<u> </u>		
	the chosen level of d	ate detail if request	ting Month or Day. Refer to specifics in
your methodology:			
			hospitals/healthcare systems can use this
information for strategic planning ar	nd medical staff planr	ning. The data qua	rter is the lowest level of definition for
discharge date.			
The data is aggregated based on qua	arters so that hospita	Is can compare and	trend for benchmarking purposes. No
patient level data is shown; only agg	regate data. Access	to run the tool is re	estricted to
			a in a report within our application adheres
to cell size suppression policy.		,	
to sen 5/20 suppression pone,			
VII. PHYSICIAN IDENTIFICATION NUI	MBERS (UPN)		
Please choose <i>one</i> of the following o		dentifier(s):	
<u> </u>			
☐ Not Requested (Standard)	⊠ Hashed ID ***		☐ Board of Registration in Medicine #
Not Requested (Standard)	△ Hasiled ID		(BORIM) ***
*****	1:C: 1: C	in a Haak ad ID an Di	
***If requested please, provide jus			
methodology: DataBay Resources using aggregate data based on physician enable hospitals/healthcare systems to use			
the data for strategic planning and m	nedical staff planning	•	
The data is aggregated based on phy	sician ID so that hosp	oitals can compare a	and trend for benchmarking purposes. No
patient/physician level data is shown	i; only aggregate data	a. Physician patterr	ns of care cannot be evaluated without
Physician ID numbers.			
VIII. HASHED UNIQUE HEALTH IDEN	TIFICATION NUMBER	R (UHIN)	
Please choose one of the following:			
rease choose one of the following.			
Mot Poguested (Standard)		☐ UHIN Requested	1***
Not Requested (Standard) *** If requested please provide just	tification for request		

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IX. HASHED MOTHER'S SOCIAL SECURITY NUMBER Please choose <u>one</u> of the following:
*** If requested please, provide justification for requesting Hashed Mother's SSN. Refer to specifics in your methodology:
X. DATA LINKAGE AND FURTHER DATA ABSTRACTION
Note: Data linkage involves combining CHIA Data with other databases to create one extensive database for analysis. Data linkage is typically used to link multiple events or characteristics that refer to a single person in CHIA Data within one database.
 Do you intend to link or merge CHIA Data to other datasets? ∑ Yes
\square No linkage or merger with any other database will occur
2. If yes, please indicate below the types of database to which CHIA Data be linked. [Check all that apply]
☐ Individual Patient Level Data (e.g. disease registries, death data)
\square Individual Provider Level Data (e.g., American Medical Association Physician Masterfile)
☐ Individual Facility Level Data level (e.g., American Hospital Association data)
☑ Aggregate Data (e.g., Census data)
☐ Other (please describe):
3. If yes, describe the data base(s) to which the CHIA Data will be linked, which CHIA data elements will be linked; and the purpose for the linkage(s):
Census data is used in conjunction with the discharge data to create use rates and to project estimated discharges to allow facilities to estimate healthcare needs in their service areas.
A If you for each proposed linkage above please describe your method or selected algorithm (e.g., deterministic or
4. If yes, for each proposed linkage above, please describe your method or selected algorithm (e.g., deterministic or probabilistic) for linking each dataset. If you intend to develop a unique algorithm, please describe how it will link each dataset.
Census data purchased by DataBay Resources. Zip code is used as the link to retrieve population.
5. If yes, please identify the specific steps you will take to prevent the identification of individual patients in the linked dataset.

Hospitals using the DataBay Navigate software research the data at the zip code level within aggregate standards,

which is the lowest level of data provided to users.

***	DUDUCATION	/ DICCERGIALATION	/ DE DELEACE
XI.	PUBLICATION	/ DISSEMINATION ,	/ KE-KELEASE

must comply with CHIA's cell size suppression policy, as set forth in the Data Use Agreement. Please explain now you will ensure that any publications will not display a cell less than 11, and no percentages or other mathematical fomulas will be used if they result in the display of a cell less than 11.
DataBay shall not publish any data on ten or fewer individuals or data derived from ten or fewer records. DataBay reports are based off of discharge counts. A cell (e.g., admittances, discharges, patients, services) less than 11 would be suppressed.
2. Do you anticipate that the results of your analysis will be published and/or publically available to any interested party? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee, that the third party must pay.
DataBay's Navigate is an online tooll used by Massachusetts Hospitals for strategic and medical staff planning and was previously approved for FY2013 data level 2. Navigate allows healthcare facilities to produce reports based on selected parameters such as zip codes, service lines and hospitals. These include Market Share reports and benchmarking reports. (see Attachment 1)
DataBay's Navigate is available to hospital facilities, marketing planners, medical staff planners, and consultants. Fees vary depending on the type(s) of data requested.
3. Will you use CHIA Data for consulting purposes? ☑ Yes ☐ No
4. Will you be selling standard report products using CHIA Data?☑ Yes☐ No
5. Will you be selling a software product using CHIA Data? ☑ Yes □ No
6. Will you be reselling CHIA Data in any format? ☑ Yes ☐ No
If yes, in what format will you be reselling CHIA Data (e.g., as a standalone product, incorporated with a software product, with a subscription, etc.)?
As stated in section IX, items 3, 4, or 5, reports providing aggregate data that meet all patient confidentiality

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such CHIA Data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting. All publication of CHIA Data

requirements, are available upon request by consultants. These reports are a product of our in-house software, Navigate.

7. If you have answered "yes" to questions 4, 5 or 6, please describe the types of products, services or studies.

DataBay Navigate reports provide market research by healthcare facilities, patient origin, benchmarking, medical staff needs and market share. As part of a customer's license agreement, DataBay requires any customer/consultant to adhere to the terms of the license agreement to maintain the confidential nature of the data.

8. If you have answered "yes" to questions 4, 5, or 6, what is the fee you will charge for such products, services or studies?

DataBay's Navigate is available to hospital facilities, marketing planners, medical staff planners, and consultants. Fees vary depending on the type(s) of data requested.

XII. APPLICANT QUALIFICATIONS

1. Describe your qualifications (and the qualifications of your co-investigators) to perform the research described.

See Attached Bio's - See Attachment 3

2. Attach résumés or curricula vitae of the Applicant/principal investigator, and co-investigators. (These attachments will not be posted on the internet.)

XIII. USE OF AGENTS AND/OR CONTRACTORS

Please note: by signing this Application, the Organization assumes all responsibility for the use, security and maintenance of the CHIA Data by its agents, including but not limited to contractors.

Third-Party Vendors. Provide the following information for all agents and contractors who will work with the CHIA Data.

Company Name:	N/A
Contact Person:	
Title:	
Address:	
Telephone Number:	

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E-mail Address:	
Organization Web	site:
database?	ve access to the CHIA Data at a location other than your location, your off-site server and/or your parate Data Management Plan must be completed by each agent who will store CHIA Data
Describe the task and the Organizatio to which the agent	s and products assigned to this agent for this project; their qualifications for completing the tasks; n's oversight of the agent, including how the Organization will ensure the security of the CHIA Data has access.
	N/A
XIV. FEE INFORMA Please consult the <u>f</u>	TION <u>ee schedules</u> for Case Mix Data and select from the following options:
☐ Single Use	2
☐ Limited M	ultiple Use
Multiple \(\)	Jse State of the Control of the Cont
Are you requesting	a fee waiver?
☐ Yes	
⊠ No	

If yes, please refer to the <u>Application Fee Remittance Form</u> and submit a letter stating the basis for your request (if required). Please refer to the <u>fee schedule</u> for qualifications for receiving a fee waiver. If you are requesting a waiver based on the financial hardship provision, please provide documentation of your financial situation. Please note that non-profit status alone isn't sufficient to qualify for a fee waiver.

By submitting this Application, the Data Applicant attests that it is aware of its data use, privacy and security obligations imposed by state and federal law *and* is compliant with such use, privacy and security standards. The Data Applicant further agrees and understands that it is solely responsible for any breaches or unauthorized access, disclosure or use of any CHIA Data provided in connection with an approved Application, including, but not limited to, any breach or unauthorized access, disclosure or use by its agents.

Applicants requesting data from CHIA will be provided with data following the execution of a Data Use Agreement that requires the Data Applicant to adhere to processes and procedures aimed at preventing unauthorized access, disclosure or use of data.

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By my signature below, I attest to: (1) the accuracy of the information provided herein; (2) that the requested data is the minimum necessary to accomplish the purposes described herein; (3) the Data Applicant will meet the data privacy and security requirements describe in this Application and supporting documents, and will ensure that any third party with access to the data meets the data use, privacy and security requirements; and (4) my authority to bind the organization seeking CHIA Data for the purposes described herein.

Signature: (Authorized Agent)	Juan Mh
Printed Name :	Scott Mullins
Title:	VP, Product Development, Intalere Executive Director, DataBay Resources
Applicant's Signature:	Som 50 MM
Name:	Scott Mullins
Title:	VP, Product Development, Intalere Executive Director, DataBay Resources
Original Data Request Submission Date:	6-15-15
Dates Data Request Revised:	7-27-15 and 10-26-15 and 6-30-16

Attachments. Please indicate below which documents have been attached to the Application and uploaded to IRBNet:

- ☐ 1. IRB approval letter or summary of project (if applicable)
- ☑ 2. Resumes of Applicant and co-investigators
- ☑ 3. Data Management Plan (for each institution that will store CHIA Data)

ATTACHMENT 1 - SAMPLE REPORTS DataBay Resources

Sample Market Share Report:

Market Share							
(AII)	Fiscal Year Fiscal Q	uarter Dis	scharge Type S	tate			
Hospital	Discharges Pa	atient Days	Total Charges (Days Total Charges Charge Per Day Charge Per Discharge	rge Per Discharge A	Average Length Of Stay Mark	Market Share
HOSPITAL A	5,425	32,765	\$349,474,750.05	\$10,686.10	\$64,419.31	8.04	17.60%
HOSPITAL B	2,883	13,548	\$93,674,015.07	\$6,914.23	\$32,491.85	4.70	9.36%
HOSPITAL C	513	1,883	\$9,450,283.00	\$5,018.74	\$18,421.60	367	%92:
HOSPITAL D	2,046	989'6	\$30,685,573,24	\$3,168.03	\$14,997.84		6.64%
HOSPITAL E	2,476	11,460	\$52,922,545.22	\$4,618.02	521,374,21	4.63	8.03%
HOSPITAL F	1,556	6,494	\$39,880,165.17	\$6,141.08	\$23,937.67	3.60	5,41%
HOSPITAL G	1,817	8,041	\$28,406,238,59	\$3,532.67	\$15,633.59		5.90%
ноѕрпаг н	13,990	86,277	86,277 \$1,971,086,401.34	\$22,846.02	\$140,892.52	9.1	45.40%
-ALL	30,816	170,154	\$2,575,579,971.68	\$15,136.76	\$83,579.31	5.52	100.00%

Sample Benchmarking Report

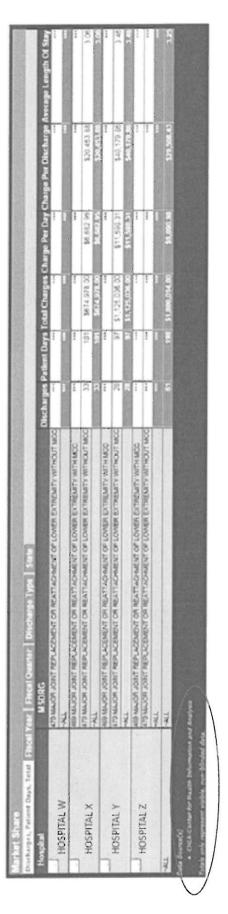
Peer Comparison						
Discharges, Avg. Charge, Avg. 1 Fisc	cal Year	iscal Quarter	Discharge 1	ype State		
Hospital		Discharges Av	Vg. Charge A	rg. LOS Avg	. Severity Avg	Case Mix
HOSPITALA		26,193	\$27,221.27	5.26	1.38	1.59
HOSPITAL B		28,953	\$23,099.57	4.89	1.32	1.46
HOSPITAL C		36.745	\$68,232.85	5.42	1,39	1.73
HOSPITAL D		39,085	\$67,654,68	5.77	1.28	1.77
14-		130,976	\$49,881.72	5.38	1.34	1.65

Data is blinded by using ***

When filtering or drilling down the required suppression is maintained at all levels.

Filtering report by using MSDRG 469 and 470.

Totals only represent visible, non-blinded data. The totals shown are not the actual totals, they represent only the totals of values the user can see in the report. Note the discharge numbers shown are 33 for hospital B and 28 for hospital C, with a total for all as 33+28=61. Hospitals A & D for 469 and 470 are not included in the totals because they are blinded due to the DUA requirements.



Sample Clinical code report:

Data is blinded by using ***

Totals only represent visible, non-blinded data.

Fiscal Year Fiscal Quarter Discharge Type State	Clinical Code Count		
Primary Count Total	Fiscal Year Fiscal Qua	Discharge Type	
SAULA PRESSURE MONITORING 123 14 15 15 15 15 15 15 15		imary Count Secondary Count	Total
### BIOPSY OF CEREBRAL MENINGES ### 119	0110 INTRACRANIAL PRESSURE MONITORING		143
119 21 11 12 13 14 15 14 15 14 15 14 15 14 15 15	0111 CLOSED BIOPSY OF CEREBRAL MENINGES		121
BIOPSY OF BRAIN 119 21 11	0112 OPEN BIOPSY OF CEREBRAL MENINGES		8.8.8
11	0113 CLOSED BIOPSY OF BRAIN		140
DF SKULL	0114 OPEN BIOPSY OF BRAIN		73
### CANNATOR ING ### CA	0115 BIOPSY OF SKULL		1111
INPLANTREPLACE MONITORING	0116 INTRACRANIAL OXYGEN MONITORING		2.53
MPLANTREPLACE NEURSTM PULSE GENERATOR	0117 BRAIN TEMPERATURE MONITORING		4.4.4
IMPLANTREPLACE MEURSTM PULSE GENERATOR	0118 OTHER DIAGNOSTIC PROC BRAIN and CEREBRAL MENINGES		9.2.4
L OF INTRACRANIAL NEUROSTIMULATOR LEAD S *** ING OF CRANIOTOMY SITE RAMIOTOMY SAMIECTOMY ON OF CATHETER INTO CRAMAL CAVITY L OF CATHETER FROM CRAMIAL CAVITY ALOF CATHETER FROM CRAMIAL CAVITY L OF CATHETER FROM CRAMIAL CAVITY ALOF CATHETER FROM CRAMIAL C	0120 CRANIAL IMPLANT/REPLACE NEURSTIM PULSE GENERATOR		11.8
MO OF CRANIOTOMY SITE 28 28 28 38 38 38 38 38	0122 REMOVAL OF INTRACRANIAL NEUROSTIMULATOR LEAD S		3.5.5
SANIOTOMY 92 46 1	D123 REOPENING OF CRANIOTOMY SITE		56
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AND OF CATHETER INTO CRAMAL CAVITY L. OF CATHETER FROM CRAMAL CAVITY ENT INTRACEREBRAL CATHETERS VIA BURR HOLES L. CRAMIAL NEUROSTIMULATOR PULSE GENERATOR 1. OF CEREBRAL MENINGES 697 697 697 678 678 678 678 679 670 670 670 670 670 670 670	0125 OTHER CRANIECTOMY		
L OF CATHETER FROM CRANIAL CAVITY ENT INTRACEREBRAL CATHETERS VIA BURR HOLES L CRANIAL NEUROSTIMULATOR PULSE GENERATOR 1 OF CEREBRAL MENINGES 697 327 4, enter for Health Information and Analysis	0128 INSERTION OF CATHETER INTO CRANIAL CAVITY		***
ENT INTRACEREBRAL CATHETERS VIA BURR HOLES L CRANIAL NEUROSTIMULATOR PULSE GENERATOR 1 OF CEREBRAL MENINGES 1 OF CEREBRAL MENINGES 697 377 4, enter for Health Information and Analysis	0127 REMOVAL OF CATHETER FROM CRANIAL CAVITY		444
AL CRANIAL NEUROSTIMULATOR PULSE GENERATOR 120 58 58 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0128 PLACEMENT INTRACEREBRAL CATHETERS VIA BURR HOLES		4: 4:
4 OF CEREBRAL MENINGES 58 697 697 4.	0129 REMOVAL GRANIAL NEUROSTIMULATOR PULSE GENERATOR		484
enter for Health Information and Analysis	0131 INCISION OF CEREBRAL MENINGES		
Data Source(s) • CHIA-Center for Health Information and Analysis	~ALL	A DESCRIPTION OF THE PERSON OF	1,024
	Data Source(s) • CHIA-Center for Health Information and Analysis		

ATTACHMENT 2 DataBay Resources

VI. ALL OTHER REQUEST – PURPOSE AND INTENDED USE

DataBay Resources, an Intalere/Intermountain Healthcare company, provides health care business intelligence software to hospitals, health systems and ambulatory surgery centers to translate state discharge databases into action plans for the community and citizens of Massachusetts.

The intended use of CHIA data would be used in our NavigateNet product. For more than a decade, DataBay Resources has been leveraging discharge data to offer valuable, easy to-use analytic tools that allow healthcare providers to better understand their data and community health needs. Our tools help hospitals and healthcare in general have a better understanding of patients and their market so that they can make better decisions. This understanding provides them evidence-based support that they can use with their regional health partnerships, community programs and various public health initiatives. This increased knowledge can mean greater efficiencies, leading to increased quality with better access to care and reduced risk in healthcare. This knowledge also provides the ability to use their analysis of the data to do strategic planning for insight to best practices, improved processes, quality outcomes and continuous improvement of healthcare.

Data analysis and presentation capabilities through NavigateNet translates datasets into easy-to-use, logic-based reports. NavigateNet is a powerful, Internet-based data analysis system that converts data into solutions for strategic decision making. More complete data reporting and analysis are vital tools in determining better methods to serve as a baseline of health status in a given community and to plan social and medical interventions relevant to the population. This ensures that community benefit programs and resources are focused on the most significant health needs.

ATTACHMENT 3 – Employee Bio's

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SCOTT MULLINS VP, Product Development, Intalere (formedy Amerinet) Intalere / DataBay Resources

As Vice President of Product Development and Executive Director of DataBay[®] Resources, Scott Mullins is responsible for managing the development and system administration of the company's full suite of software products and applications. A healthcare IT industry professional with over a quarter century of extensive programming and team leadership experience, Mullins is also highly skilled in the strategic planning, financial and personnel management of IT projects and departments.

Prior to joining Amerinet, Mullins worked in progressively responsible positions as a programmer, analyst and systems leader for some of the world's most prominent and successful corporations including US Steel, AT&T and Xerox[®]. Starting out on the ground floor with Amerinet predecessor Hospital Shared Services in 1993, Mullins has been integral in the design and building of the company's current technology product and services offerings, as well as the IT hardware/software infrastructures and development of talent.

Mullins attended the University of Pittsburgh in Pennsylvania, achieving a bachelor's in Information Science, as well as a minor in Economics. He has extensive knowledge of tools and technologies including languages (C#, ASP, ASP.Net, VB.Net, XML Java [®]JavaScript, PowerBuilder, PowerHouse 4GL, COBOL, Fortran, Pascal), databases (Oracle[®], SQL Server, Sybase[®] Microsoft[®] Access[™], DB2), operating systems (Windows[®], Windows Server, Mac OSx, Linux, Unix) and development products (Microsoft Visual Studio[®], .Net, Xcode, SQL Server Reporting Services, Team Foundation Server, Commerce Server, Windows Media Server, Crystal Reports, BizTalk Server, Cognos Series 7 BI Suite).

JOANNE SARACHINE Product Manager Amerinet / DataBay Resources

As product manager of DataBay® Resources, Joanne Sarachine is responsible for strategic planning and successful execution of the organization's business development and marketing goals for the Navigate software line – a comprehensive suite of IT solutions that improve healthcare quality, operational efficiency and market share through innovative financial and executive resources data analysis tools and services.

Sarachine's diverse career in healthcare spans more than 25 years and includes positions in project management, information technology (IT) application development and implementation, and nursing. Prior to joining DataBay Resources, she provided her clinical and IT skills for other organizations such as Management Science Associates, Coventry Health Care, University of Pittsburgh Medical Center, Xerox Connect and Allegheny Health Education & Research Foundation (AHERF). She has extensive knowledge of software product management as well as analyzing healthcare data, claims, discharge data and strategic planning.

Uniquely educated in both medical and IT, Sarachine holds a Bachelor of Science in nursing from Indiana University of Pennsylvania and a Master of Business Administration from University of Pittsburgh. In addition, she earned a master's certificate in project management for information technology and is a certified Project Management Professional (PMP) by Project Management Institute (PMI).

STEVE DUNN Director of Sales Amerinet / DataBay Resources

As sales director for DataBay® Resources, Steven Dunn is responsible for developing and implementing all aspects of the sales process including lead generation, knowledge development, evaluation and sales closure. A business professional with more than 30 years of healthcare and business development experience, Dunn also has particular expertise in healthcare data analytics.

Dunn has held sales positions as an assistant vice president healthcare sales for PNC Healthcare and a managing member of Healthcare Software Solutions, both based in Pittsburgh, Pa. He also worked as a regional sales manager for Konica Minolta Medical Imaging, Wayne, N.J. Immediately prior to joining Amerinet, Dunn served as a business development director for Cardon Outreach, The Woodlands, Texas.

Dunn received a bachelor's degree in Education from West Chester University, West Chester, Pa. He has completed extensive course work at the Graduate School of Education from the University of Pittsburgh and is a Certified Revenue Cycle Representative (CRCR) from the Healthcare Financial Management Association.

CAROL YOUNG Business Director Amerinet / DataBay Resources

As business director for DataBay® Resources, Carol Young is responsible for managing the essential administrative functions required for successful daily operations, growth and industry presence. A healthcare business professional with over 25 years of directly-related hands-on experience, Young also has particular expertise in healthcare regulatory processes and market analysis.

An Amerinet veteran, Young has held progressively responsible positions for the company including market analyst and research manager, application support and acute care services associate. In these various administrative roles, she garnered extensive experience in critical operational, customer and technical support processes including HIPAA compliance, RFP completion, benchmarking data compilation and quality testing. Prior to joining Amerinet and DataBay Resources, Young held similar administrative management positions with organizations such as the world-renowned UPMC hospital system.

Young is a Research Honors Highest Distinction award recipient from Geneva College and holds a 4.0 Bachelor of Science degree in Organizational Development. She has an additional certification in administrative practice and extensive post-graduate training in numerous software suites and applications.

DENNIS MELLO Senior Application Developer Amerinet / DataBay Resources

As a senior applications developer for DataBay® Resources, Dennis Mello is one of the architects of the company's proprietary software products and services, including the Navigate line of products – a comprehensive suite of software solutions that improve healthcare quality, operational efficiency and market share through innovative financial and executive resources data analysis tools and services. An IT professional with more than 30 years of business applications development experience, Mello also functions as a department leader in project management methodologies such as agile scrum and sprint.

A long-time Amerinet employee, Mello, as a sub-contractor with Vector Health System Inc., helped design, implement and maintain the company's flagship membership system. Later, he was the primary architect of Amerinet AccuPrice[®], an innovative price auditing solution that transforms spend data into actionable financial management information. More recently, Mello led the development of CheckNet, a web-based automated solution for manual UB-04 data submission and validation.

Highly-educated in both technology and business management, Mello earned a bachelor's in Computer Science from Nova Southeastern University in Florida, as well as an MBA from the prestigious Providence College in Rhode Island. In addition, Mello has significant knowledge and post-graduate training in a variety to tools and technologies including C#, MVC, JSON, Java™ JQuery and JavaScript, AJAX, nUnit testing, LINQ to SQL and high performance SQL Server stored procedure development.

ANTHONY MORGAN Manager, Customer-Facing Data Services Amerinet / DataBay Resources

As customer-facing data services manager, Anthony Morgan is responsible for a team of database analysts to provide data warehouse design, development and support for the extract, transform and load processes for all of Amerinet's customer-facing tools. In addition he oversees the overall data flow of DataBay® Resources' Navigate software line — a comprehensive suite of IT solutions that improve healthcare quality, operational efficiency and market share through innovative financial and executive resources data analysis tools and services.

Morgan joined Amerinet in 1997. Prior to Amerinet, Morgan served as a senior consultant for Omega Systems, a professional technology firm, and as a senior programmer at WAWD Systems, a systems integrator and general software consulting firm. He has extensive knowledge of how to acquire and enable data for business processes.

Morgan attend Slippery Rock University, achieving a Bachelor of Science in computer science.

JOSEPH PIASENTE Senior Application Developer Amerinet / DataBay Resources

As a senior applications developer for DataBay[®] Resources, Joseph Piasente is one of the primary architects of the company's proprietary software products and services. An IT professional with more than a decade of business applications development experience, Piasente contributes to full cycle creation, implementation and maintenance of the Navigate and CheckNet software suites utilizing both agile and waterfall project management methodologies. Piasente also works directly with customers in a technical support capacity.

Prior to joining Amerinet, Piasente held progressively responsible positions with Lilly Software Associates, a global supply chain management solutions organization. Starting in Client Relations, he moved into testing, then hands-on software engineering, developing a materials management automation process for inventory control, order entry, labor reporting and costing. He was promoted to senior application developer by Amerinet in 2009 after several years leading a wide variety of agile methods- directed projects enhancing user experiences and assisting in software product development.

Piasente earned a Bachelor's in Computer Science from West Virginia University in Morgantown, W.V. and has technical proficiency in a variety of tool and technologies including languages (MVC, C#, VB.NET, LINQ to SQL, HTML, Ingres 4GL, JavaTM, jQuery and JavaScript, PL/SQL, C, C++, ADA, AJAX, JSON), databases (Microsoft[®] SQL Server, Oracle 9i, Microsoft Access[™], Ingres[™]), operating systems (Windows[®] 7, XP 2000 Professional and 98; Microsoft Server 2000, 2003 2008; UNIX[®]) and software (Microsoft Visual Studio [®]·NET, NUnit, Infragistics Web and Windows controls, Jet Brains Team City, ReSharper, Team Foundation Server, Visual Source Safe, SourceOffSite, WebEx, Norton[™] Ghost, Microsoft Office).

RONALD TERRIT Program Manager Amerinet / DataBay Resources

As program manager for DataBay[®] Resources, Ronald Territ is responsible for overseeing the product leads and application development efforts for the entire suite of software released by the IT team, as well as the development and maintenance of complex client web applications. A highly-skilled systems engineer with almost 25 years of successful hands-on application development and project management experience, Territ spearheaded and mastered DataBay's adoption of agile scrum methodology.

Territ joined Amerinet in 2004 after holding both technical and leadership positions in software automation and systems engineering for Core Furnace Systems and Daxus Corps., as well as the historic Electronic Data Systems Inc. GM team, where he helped develop the parts scheduling system for automotive plant materials management. Before his promotion to program manager in 2008, as the lead application developer for Amerinet, Territ designed and developed one of DataBay Resources' keystone products, Navigate-MD, a web-based physician recruitment and need analysis tool, and contributed many of the data extraction utilities central to the Navigate software suite's business intelligence offerings.

Territ holds a Master of Science in Manufacturing Systems Engineering from the University of Pittsburgh, as well as a B.S. in Engineering Physics from Grove City College and an engineer-in-training certification. In addition, Territ is proficient in an extensive list tools and technologies including programming languages (ASP.NET, MVC, C#, VB.NET, HTML, Java™ JavaScript and jQuery, LINQ to SQL, XML, AJAX, JSON, Visual Basic, C, FORTRAN), databases (Microsoft® SQL Server 2008, Microsoft Visual Studio®, FoxPro, Oracle®, Oracle Lite, Oracle Rdb, Microsoft Access™, SQL, ADO.NET, OLE, ODBC, RDO), software (ESRI ArcIMS, InRule®, Infragistics NetAdvantage Components, Contour Components OLAP Cube, Microsoft Team Foundation Server, Visual SourceSafe, Microsoft Project, Iconics, Wonderware®, Specview, Vista Systems (V-Systems), DECforms, DEC GKS, SmartStar, Excelerator CASE tool) and XML web services, multi-threading, OPC (OLE for Process Control), COM, Windows® API, ActiveX, MAPI and IIS.

TOM TRELEVEN Data Warehouse Analyst Amerinet / DataBay Resources

As a data warehouse analyst for DataBay® Resources, Tom Treleven designs, develops, implements and maintains IT storage of the Navigate line of products – a comprehensive suite of software solutions that improve healthcare quality, operational efficiency and market share through innovative financial and executive resources data analysis tools and services. A true software professional with more than 8 years of healthcare, health insurance, education, and business services IT experience, Treleven has particular expertise in business intelligence, enterprise data warehousing and reporting, and data analysis.

Prior to joining Amerinet in 2013, Treleven worked at EDMC as a Software Engineer III on the Enterprise Data Warehouse team implementing data integration and data architecture solutions to provide the executive leadership team with fact-based decision support systems.

Treleven attended Clarion University of Pennsylvania, earning a Bachelor of Science degree in Computer Science.

MARY ANN AUGUSTINE Data Administration Analyst Amerinet / DataBay Resources

Converting state data for use in DataBay® Resources products is Mary Ann Augustine's responsibility as data analyst. She evaluates, verifies and ensures the quality of processed data. She works closely with IS, application support and sales personnel to provide a timely production and distribution of customer data installs and supporting files.

Augustine has over 20 years of healthcare experience collaborating with senior management in strategic planning and medical staff development strategies. Her background includes certification in technical training at Robert Morris, CCAC and the University of Pittsburgh.

SUSANNE FLAHERTY Application Support Associate Amerinet / DataBay Resources

As application support associate for DataBay® Resources, Susanne Flaherty is responsible for providing high quality support to DataBay Resources' clients. In this capacity, Flaherty develops and generates decision support and benchmarking reports for clients, along with designing and implementing training and education services. As part of the DataBay Team, Flaherty is instrumental in providing further development of DataBay products and services and provides input and implementation of marketing plans.

Flaherty joined DataBay Resources in 2006 after holding the position of Career Development Specialist for The Hospital Council of Western Pennsylvania. At Hospital Council, Flaherty coordinated all aspects of a career and college fair for high schools students, published an annual career awareness newspaper for high school students, and coordinated a Student of the Year Scholarship Awards. The position was a response by Hospital Council to its members in an effort to address the anticipated shortage of clinical positions in the healthcare field.

Flaherty holds a B.A. in Urban Planning from The University of Pittsburgh and was a Communication Specialists with the U.S. Navy, honorable discharge.