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Spoke	Site investigators	100.0	Total	Cervical
		ICD-9 codes	806.0-806.9, 952.0-952.4, 952.8-952.9	806.0-806.1, 952.0
University of Arizo			25	26
Scottsdale Hea	lthcare Osborn Medical Center	Emergency Med/Trauma	35	26
	Kenneth Ransom	Neurosurgery		
	Joseph Zabramski Catherine Foll	Rehabilitation		
Rannar Good S	Samaritan Medical Center, Phoenix	Renabiliation	23	12
Danner Good S	Paul Dabrowski	Emergency Med/Trauma	23	12
	Vikram Kumar	Neurosurgery		
	Christopher Barnes	Rehabilitation		
	Vafa Ghaemmaghami	Neurocritical Care/Critical Care		
	Paul Dabrowski	Trauma Surgery		
	Alexander McLaren	Orthopedic Surgery		
University Med		Ormopeute surgery	202	119
Oniversity ivies	Peter Rhee	Emergency Med/Trauma	202	11)
	Martin Weinand	Neurosurgery		
niversity of Cinc	innati Hub			
University Hos			100	62
•	Arthur Pancioli	Emergency Med/Trauma		
	Charlie Kuntz	Neurosurgery		
	Stephen Page	Rehabilitation		
mory University	Hub			
Grady Memori		E W 1/E	50	31
	David W. Wright	Emergency Med/Trauma		
	Jay Dhall	Neurosurgery		
	David Burke	Rehabilitation		
	Jeff Salomone	Trauma Surgery		
	Manish Bawa	Orthopedic Surgery		
Ienry Ford Healt l Henry Ford Ho	=		34	24
nemy rolu no	Taher Vohra	Emergency Med/Trauma	31	2.
	Jack Rock	Neurosurgery		
	Kenneth Podell	Rehabilitation		
	Tamer Abdelhak	Neurocritical Care/Critical Care		
	Anthony Falvo	Trauma Surgery		
Iniversity of Kent				
University of k	Kentucky Hospital		59	31
	Roger Humphries	Emergency Med/Trauma		
	Robert Owen	Neurosurgery		
	Robert Nickerson	Rehabilitation		
	Brenda Fahy	Neurocritical Care/Critical Care		
	Andrew Bernard	Trauma Surgery		
	Carter Cassidy	Orthopedic Surgery		
Iniversity of Mary	yland Hub ley Shock Trauma Center		180	117
K Adams COW		Emergency Med/Trauma	100	11/
	Jay A Menaker Bizhan Aarabi	Neurosurgery		
	Peter Gorman	Rehabilitation		
		Neurocritical Care/Critical Care		
	Kevin Sheth, Deborah Stein	1		

TTb			SCI per ye	ar, 2008 est.
Hub Spoke	Site investigators		Total	Cervica
	Deborah Stein	Trauma Surgery		
	Steve Ludwig	Orthopedic Surgery		
University of Minne	ocata Hub			
	ty Medical center		65	40
•	Michelle Biros	Emergency Med/Trauma		
	Gaylan Rockswold	Neurosurgery		
	Sarah Rockswold	Rehabilitation		
	Mustapha Ezzedine	Neurocritical Care/Critical Care		
New York Presbyte	rian Hub			
New York Hosp			5	4
	Neal Flomenbaum	Emergency Med/Trauma		
	Phil Steig	Neurosurgery		
	Joel Stein	Rehabilitation		
	Axel Rosengart	Neurocritical Care/Critical Care		
	Phil Barie	Trauma Surgery		
Oregon Health Scie	nces University Hub			
OHSU Hospital			50	38
	Craig Warden	Emergency Med/Trauma		
	Andrew Nemecek	Neurosurgery		
	John Kafrouni	Rehabilitation		
Stanford University	Hub			
	sity Medical Center		13	6
	Jim Quinn	Emergency Med/Trauma		
	Roland Torres	Neurosurgery		
	Christine Wijman	Neurocritical Care/Critical Care		
	David Spain	Trauma Surgery		
Femple University	Hub			
Thomas Jefferso	on University		90	60
	Murray Cohen	Emergency Med/Trauma		
	James Harrop	Neurosurgery		
	Ralph Marino	Rehabilitation		
	Jack Jallo	Neurocritical Care/Critical Care		
	Murray Cohen	Trauma Surgery		
	Alexander Vaccaro	Orthopedic Surgery		
Temple Univers	ity Hospital		387	41
	Mark Seamon	Emergency Med/Trauma		
	Michael Weaver	Neurosurgery		
	Ian Maritin	Rehabilitation		
	Mark Seamon	Trauma Surgery		
University of Texas	Hub			
Hermann Hospi	tal Texas Medical Center		99	69
	Elizabeth Jones	Emergency Med/Trauma		
	Alex Valadka	Neurosurgery		
	Jeffrey Berliner	Rehabilitation		
	Pratik Doshi	Neurocritical Care/Critical Care		
	rnia San Francisco Hub			
San Francisco C	General Hospital Medical Center		60	30
	William Whetstone	Emergency Med/Trauma		
	Geoff Manley	Neurosurgery		

Spoke Site investigators	Hub			SCI per year, 2008 es	
Liclaude Hemphill Mitch Cohen Truman Surgery University of Pennsylvania IIIab Hospital of the University of Pennsylvania Jill Baten James Schuster Jose Bascual Jose Bascual Christiana Care Health System TBD Virginia Commonwealth University Hub Virginia Commonwealth University Health System Jose Panna Mathem Barce Mathem William McKinley Wayne State University Hub William Reaumont Hospital Jeffrey Fischgrund Detroit Receiving Hospital Robert Welch Mark Homyak Soott Millis Mare Velilla Mare Velilla Robert Johnson Soott Millis Robert Johnson Soott Millis Robert Johnson Soott Millis Robert Johnson Robert Milliam Robina Robert Johnson Soott Millis Robert Johnson Soott Millis Robert Johnson Soott Millis Robert Johnson Robert Johnson Soott Millis Robert Johnson Soott Millis Robert Johnson Robert Johnson Robert Johnson Robert Melonian Robert Johnson Robert Melonian Robert Johnson Rob		Site investigators		Total	Cervica
Mitch Cohen Mitch		Lisa Pascual	Rehabilitation		
University of Pennsylvania Hub Hospital of the University of Pennsylvania James Schuster Joshua Levine, A. Kofke, S. Park Joshua Le		J. Claude Hemphill	Neurocritical Care/Critical Care		
Hospital of the University of Pennsylvania Jalla Baren James Schuster Joshua Levine, A. Kofke, S. Park Jose Puscual Jose Puscual Jose Puscual Jose Puscual Trauma Surgery Christiana Care Health System Trauma Surgery Trauma Surgery 75 51 TBD Virginia Commonwealth University Hub Virginia Commonwealth University Health System Joseph P. Ornato Bruce Mathern Bruce Mathern Bruce Mathern Bruce Mathern Bruce Milliam Beaumont Hospital Aghert Skort Fernando Diaz Christine Chamberlain Detroit Receiving Hospital Robert Welch Mark Hornyak Sout Milliam Coplin Larry Diebel Larry Diebel Rabul Vaidya Sinai-Grace Hospital Mare Velilla Robert Johnson Scott Millis Rehabilitation Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Maring Milliam Waring Milliam Carpen Milliam Maring Milliam Carpen Milliam Maring Milliam Carpen Milliam Maring Ros Bullock, Steven Olvey Mark McKenney Neurosurgery Rehama Surgery Rehabilitation Neurosurgery Rehabilitation Mare Crossman, Kuthleen Schrank M. Wang, A. Levi, S. Vanni, B. Green Andrew Sherman, Diana Cardenus Ross Bullock, Steven Olvey Mark McKenney Mark McKenney Neurosurficial Care Critical Care Trauma Surgery Rehabilitation Remainian Neurosurgery Rehabilitation Remainian Neurosurgery Rehabilitation		Mitch Cohen	Trauma Surgery		
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Joshua Levine, A. Kofke, S. Park Jose Pascual Jose Pascual Jose Pascual Trauma Surgery Christiana Care Health System TBD Virginia Commonwealth University Hub Virginia Commonwealth University Hub Virginia Commonwealth University Hush Virginia Commonwealth University Health System Joesph P. Ornato Bruce Mathern William McKinley Rehabilitation Wayne State University Hub William Beaumont Hospital Robert Swor Fernando Diaz Christine Chamberlain Jeffrey Fischgrund Detroit Receiving Hospital Robert Welch Mark Hornyak Scott Millis Rehabilitation Rehabilitation Neurosurgery Rehabilitation Rehabilitation Neurosurgery Rehabilitation Neurosurgery Scott Millis Rehabilitation Neurosurgery Sinai-Grace Hospital Mare Vehilla Mare Vehilla Robert Johnson Scott Millis Rehabilitation Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Ardecheide Dennis Maiman William Waring Michel Torbey Karen Brasel Neurosurgery Neurosurgery Readul Trauma Neurosurgery Rehabilitation Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Ardecheide Dennis Maiman William Waring Michel Torbey Karen Brasel Dennis Maiman Mare Grossman, Kathleen Schrank Mare Grossman, Kathlee		Jill Baren	Emergency Med/Trauma		
Christiana Care Health System 75 51 TBD Virginia Commonwealth University Hub Virginia Commonwealth University Health System 50 38 Joseph P. Ornato Emergency Med Trauma Bruce Mathem Neurosurgery William McKinley 89 55 Robert Swor Emergency Med Trauma Pernando Diaz Neurosurgery Christine Chamberlain Rehabilitation Detroit Receiving Hospital 89 55 Robert Swor Emergency Med Trauma 80 89 55 Robert Swor Emergency Med Trauma 80 89 55 Robert Swor Emergency Med Trauma 80 89 85 Robert Swor Emergency Med Trauma 80 80 87 80 87 80 87 80 87 80 87 80 87 80 87 80 87 80 87 80 87 80 87 8 8 8 8		James Schuster	Neurosurgery		
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Virginia Commonwealth University Hub Virginia Commonwealth University Health System Joseph P. Ornato Bruce Mathem William McKinley Wayne State University Hub William Beaumont Hospital Robert Swor Fernando Diaz Fernando Diaz Fernando Diaz Christine Chamberlain Jeffrey Fischgrund Detroit Receiving Hospital Robert Welch Mark Hornyak Soott Millis William Coplin Lurry Diebel Rahul Vaidya Sinai-Grace Hospital Marc Velilla Robert Johnson Scott Millis Frediett Memorial Lutheran Hospital Frediet College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Aruderheide Dennis Maiman Michel Torbey Karen Brasel Mare Grossman, Kathleen Schrank Mare Grossman, Kathleen Schrank Mare Speep Neurocal Care Critical Care Trauma Surgery MeddTrauma Robert Johnson Neurosurgery Scott Millis Rehabilitation Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Aruderheide Dennis Maiman Milliam Waring Michel Torbey Rand Robert Johnson Robert Jo		Jose Pascual	Trauma Surgery		
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Virginia Commonwealth University Health System Bruce Mathern Bruce Mathern William McKinley Wayne State University Hub William Beaumont Hospital Robert Swor Fernando Diaz Christine Chamberlain Jeffrey Fischgrund Detroit Receiving Hospital Robert Welch Mark Hornyak Scott Millis William Coplin Larry Diebel Amer Velilla Robert Johnson Scott Millis Robert Johnson Robert Welch Mare Velilla Robert Welch Larry Diebel Mare Velilla Robert Mance Welling Mare Velilla Robert Welch Mare Scott Millis Rehabilitation Neurosurgery Rahul Vaidya Trauma Surgery Sinai-Grace Hospital Tom Aruderheide Dennis Maiman Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Aruderheide Dennis Maiman Neurosurgery William Waring Michel Torbey Karen Brasel University of Miami Jackson Memorial Hospital Mare Grossman, Kathleen Schrank M. Wang, A. Levi, S. Vanni, B. Green Andrew Sherman, Diana Cardenas Ross Bullock, Steven Olvey Mark McKenney Prauma Surgery Neurocritical Care Critical Care Neurosurgery Neurocritical Care Critical Care Menosurgery Andrew Sherman, Diana Cardenas Rehabilitation Neurosurgery Neurocritical Care Critical Care Mark Mckenney Neurocritical Care Critical Care Menosurgery Neurocritical Care Critical Care Mark Mckenney Neurocritical Care Critical Care Mark Mckenney Neurocritical Care Critical Care Neurosurgery Neurocritical Care Critical Care Neurosurgery Neurocritical Care Critical Care Mark Mckenney Neurocritical Care Critical Care Neurosurgery Neurocritical Care Critical Care Neurosurgery Neurocritical Care Critical Care Mark Mckenney Neurocritical Care Critical Care Neurosurgery Neurocritical Care Critical Care Mark Mckenney Neurocritical Care Critical Care Neurosurgery		TBD			
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Wayne State University Hub William Beaumont Hospital 89 55 Robert Swor Emergency Med/Trauma Fernando Dia2 Neurosurgery Christine Chamberlain Rehabilitation Jeffrey Fischgrund Orthopedie Surgery Detroit Receiving Hospital Robert Welch Emergency Med/Trauma 20 17 Mark Hornyak Neurosurgery Scott Millis Rehabilitation Neurocritical Care/Critical Care Larry Diebel Trauma Surgery Sinai-Grace Hospital 17 12 Mare Velila Emergency Med/Trauma 17 14 Froediert Memorial Lutheran Hospital 77 44 Tom Aruderheide Emergency Med/Trauma Neurosurgery Scott Millis Rehabilitation 77 44 Medical College of Wisconsin Hub Froedlert Memorial Lutheran Hospital 77 44 Memorial Hospital 77 7 44 Memorial Hospital 80 Medical College of Wisconsin Hub 80 Froedlert Memorial Lutheran Hospital 77 7 7 7 7 7 7 7 8 8 8 9 5 5 5 70 70 Mare Grossman, Kathleen Schrank Emergency Med/Trauma 105 70 Mare Grossman, Kathleen Schrank Emergency Med/Trauma 105 70 Mare Grossman, Kathleen Schrank Emergency Med/Trauma Neurosurgery Andrew Sherman, Diana Cardenas Rehabilitation Neurosurgery Andrew Sherman, Diana Cardenas Rehabilitation Rehabilitation Neurosurgery Andrew Sherman, Diana Cardenas Rehabilitation Neurosurgery Andrew Sherman, Diana Cardenas Rehabilitation Neurosurgery Andrew Sherman, Diana Cardenas Rehabilitation Neurosurgery Neurocritical Care/Critical Care Critical Care		Joesph P. Ornato	Emergency Med/Trauma		
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Robert Swor Fernando Diaz Neurosurgery Christine Chamberlain Jeffrey Fischgrund Orthopedie Surgery Detroit Receiving Hospital Robert Welch Mark Hornyak Scott Millis William Coplin Larry Diebel Rahul Vaidya Sinai-Grace Hospital Marc Velilla Robert Johnson Scott Millis Rehabilitation Meurosurgery Rahul Vaidya Marc Velilla Robert Johnson Scott Millis Rehabilitation Meurosurgery Sinai-Grace Hospital Marc Velilla Robert Johnson Scott Millis Rehabilitation Meurosurgery Sinai-Grace Hospital Marc Velilla Robert Johnson Scott Millis Rehabilitation Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Aruderheide Dennis Maiman William Waring William Waring Michel Torbey Karen Brasel University of Miami Jackson Memorial Hospital Marc Grossman, Kathleen Schrank M. Wang, A. Levi, S. Vanni, B. Green Andrew Sherman, Diana Cardenas Rehabilitation Reurosurgery Med/Trauma Remergency Med/Trauma Neurosurgery Neurocritical Care/Critical Care Mark Mckenney Neurosurgery Neurocritical Care/Critical Care Marc Grossman, Kathleen Schrank M. Wang, A. Levi, S. Vanni, B. Green Andrew Sherman, Diana Cardenas Rehabilitation Neurosurgery Med/Trauma Neurosurgery Neurocritical Care/Critical Care Mark Mckenney Neurocritical Care/Critical Care Mark Mckenney Neurocritical Care/Critical Care Marc Mckenney Neurocritical Care/Critical Care Marc Mckenney Neurocritical Care/Critical Care Mark Mckenney Neurocritical Care/Critical Care Mark Mckenney Neurocritical Care/Critical Care Marc Mckenney Neurocritical Care/Critical Care Mark Mckenney Neurocritical Care/Critical Care Marc Mckenney Neurocritical Care/					
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Christine Chamberlain Jeffrey Fischgrund Orthopedic Surgery Detroit Receiving Hospital Robert Welch Robert Welch Mark Hornyak Scott Millis William Coplin Larry Diebel Rahul Vaidya Orthopedic Surgery Sinai-Grace Hospital Robert Johnson Scott Millis Robert Johnson Robert Johnson Scott Millis Rehabilitation Neurosurgery Sinai-Grace Hospital Robert Johnson Robert Johnson Robert Johnson Remoil Lutheran Hospital Froedtert Memorial Lutheran Hospital Tom Aruderheide Dennis Maiman Neurosurgery William Waring Rehabilitation Medical College of Wisconsin Hub Froedtert Memorial Lutheran Hospital Tom Aruderheide Dennis Maiman Neurosurgery William Waring Rehabilitation Weurosurgery William Waring Rehabilitation Michel Torbey Karen Brasel Trauma Surgery University of Miami Jackson Memorial Hospital Feergency Med/Trauma Mare Grossman, Kathleen Schrank M. Wang, A. Levi, S. Vanni, B. Green Andrew Sherman, Diana Cardenas Ross Bullock, Steven Olvey Mark Mckenney Trauma Surgery Trauma Surgery Neurocritical Care/Critical Care Mark Mckenney Trauma Surgery			•		
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Total Number of Potential Subjects per year at 18 Hub-Spoke Complexes 1,931 1,013					
	Total Number	r of Potential Subjects per year at 18	B Hub-Spoke Complexes	1,931	1,013