

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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Supplemental Materials

Table of Contents

The All of Us Research Program Investigators	2
Funding sources	6
Table S1: Estimated baseline prevalences and incidences of disease conditions in one million people.....	7
Table S2: List of Healthcare Provider Organizations as of 2019.....	8
Table S3: Initial sample collection protocols.	10

The *All of Us* Research Program Investigators

Writing Committee: Joshua C Denny¹; Joni L Rutter²; David B Goldstein³; Anthony Philippakakis⁴; Jordan W Smoller⁵; Gwynne Jenkins²; Eric Dishman²

Steering Committee: *Co-Chairs:* Joshua C Denny¹; Stephanie Devaney²; Joni L Rutter²; *Committee Members:* Eric Boerwinkle⁶; Murray Brilliant⁷; Patricia Butts⁸; Michael Castro⁹; John Chaffins¹⁰; Katherine Chang⁹; Veena Channamsetty¹¹; Carmen Chinae¹²; Alyssa Cotler²; Martha Daviglus¹³; Adolph Falcón¹⁴; Gretchen Funk¹⁵; Stacey Gabriel⁴; Kelly Gebo²; Edgar Gil Rico¹⁴; David Glazer¹⁶; David B Goldstein³; Joan M Grand¹⁷; Philip Greenland¹⁸; Kristin Hall¹⁹; Richard Hochfelder⁹; Praduman Jain²⁰; Ayanna Jenkins²¹; Christine C. Johnson²²; Parinda Khatri²³; Bruce Korf²⁴; Mitchell R Lunn²⁵; Chris Lunt²; Patrick McGovern¹⁰; Michelle McNeely⁹; Steve Mikita⁹; Fatima Munoz²⁶; Christopher J. O'Donnell²⁷; Lucila Ohno-Machado²⁸; Debbie A. Nickerson²⁹; Akinlolu Ojo³⁰; Fornessa Randal³¹; Debra Rice²¹; Steven E. Reis³²; Dara Richardson-Heron²; Eric Schleuter³³; Jordan W Smoller⁵; Steve Steinhubl³⁴; Karl Surkan⁹; Gregory Talavera²⁶; Ronnie Tepp³⁵; Steve Thibodeau³⁶; Eric Topol³⁴; Patricia Watkins Lattimore³⁷; David Wellis³⁸; Consuelo H. Wilkins¹; Amanda Wilson³⁹; Joyce Winkler³³; Stephan Zuchner⁴⁰

***All of Us* Principal Investigators:** *Regional Medical Centers:* Brian Ahmedani²²; Habib Ahsan⁴¹; Hoda Anton-Culver⁴²; Murray Brilliant⁷; Elizabeth Burnside⁴³; Olveen Carrasquillo⁴⁰; Martha Daviglus¹³; Marc Drezner⁴³; Dorothy Farrar-Edwards⁴³; Ali Gharavi³; David B. Goldstein³; Philip Greenland¹⁸; William Hogan⁴⁴; George Hripcsak³; Priscilla Igho-Pemu⁴⁵; Christine C. Johnson²²; Rainu Kaushal⁴⁶; Elizabeth W Karlson⁵; Bruce Korf²⁴; Cora E Lewis²⁴; Oscar Marroquin³²; Shawn Murphy⁵; George O'Connor⁴⁷; Christopher J. O'Donnell²⁷; Lucila Ohno-Machado²⁸; Akinlolu Ojo³⁰; Margaret A. Pericak-Vance⁴⁰; Eric Reiman³⁰; Steven E. Reis³²; M. Elizabeth Ross⁴⁶; Elizabeth Shenkman⁴⁴; Jordan W Smoller⁵; Andreas Theodorou³⁰; Rhonda K Trousdale⁴⁸; Phil Tsao²⁷; Shyam Visweswaran³²; Scott Weiss⁵; Jeffrey Whittle⁴⁹; Robert Winn¹³; Stephan Zuchner⁴⁰; Michael E. Zwick⁵⁰; *Federally Qualified Health Centers:* Veena Channamsetty¹¹; Carmen Chinae¹²; Ayanna Jenkins²¹; Nancy Jenks¹²; Parinda Khatri²³; Fatima Munoz²⁶; Debra Rice²¹; Eric Schlueter³³; Gregory Talavera²⁶; Amy Taylor¹¹; Febe Wallace²³; Joyce Winkler³³; *Data and Research Center:* Joshua C. Denny¹; David Glazer¹⁶; Sekar Kathiresan⁴; *Biobank:* Mine Cicek³⁶; Steve Thibodeau³⁶; *The Participant Center:* Eric Topol³⁴; *The Participant Technology Systems Center:* Praduman Jain²⁰; *Communications and Engagement:* Patrick McGovern¹⁰; Ronnie Tepp³⁵; *Community Partners:* Adolph Falcón¹⁴; Gretchen Funk¹⁵; Patricia Watkins Lattimore³⁷; Mitchell R Lunn²⁵; Edgar Gil Rico¹⁴; *Genome Centers:* Evan E. Eichler²⁹; Stacey Gabriel⁴; Eric Boerwinkle⁶; Kimberly Doheny⁵¹; Richard Gibbs⁴⁷; Gail P Jarvik²⁹; Deborah A Nickerson²⁹; Heidi L. Rehm⁴; Scott Topper⁴

Committee and Working Group Chairs: *Access, Privacy and Security:* Brad Malin¹; Rex Chisholm¹⁸; *Consent:* John Chaffins¹⁰; John Wilbanks⁵⁰; *Data Privacy and Security:* Brad Malin¹; *Electronic Health Records:* George Hripcsak³; Abel Kho¹⁸; *Omics:* Sekar Kathiresan⁴; *Engagement & Communication:* Karriem Watson¹³; Usha Menon³⁰; Consuelo Wilkins¹; *Participant Provided Information:* Brian Ahmedani²²; Rob Cronin¹; Chris O'Donnell²⁷; Paul

Harris¹; *Physical Measurements and Biospecimens*: Steve Steinhubl³⁴; Steve Thibodeau³⁶; *Protocol Integration*: Akinlolu Ojo³⁰; Sekar Kathiresan⁴; *Publications, Access, and Guidelines*: Rex Chisholm¹⁸; Dennis McNamara³²; *Return of Value*: Stephen Mikita⁹; Robert Green⁵; Amy Taylor¹¹; *Science*: Jordan W Smoller⁵; Mona Fouad²⁴; *Special Populations*: Raj C. Shah⁵⁰; Steve Mikita⁹

NIH All of Us Research Program Staff: Kate Blizinsky²; Mark Caulder²; Alyssa Cotler²; Stephanie Devaney²; Eric Dishman²; Stephanie Fowler²; Holly Garriock²; Kelly Gebo²; Gwynne Jenkins²; Maria Lopez-Class²; Chris Lunt²; James McClain²; Brad Ozenberger²; Dara Richardson-Heron²; Edward Ramos²; Joni L Rutter²

Other Key Contributors, by Awardee:

Biobank: John Maragos³⁶

Community Partners: *Asian Health Coalition*: Manasi Jayaprakash³¹; Emily Koebnick³¹; Helen Lam³¹; Chieko Maene³¹; Jennifer Oh³¹; Amy Wang³¹; *SGM Community Engagement Partner*: Mahri Bahati²⁵; Kirsten Bibbins-Domingo²⁵; Carolyn Hunt²⁵; Micah Lubensky²⁵; Juno Obedin-Maliver²⁵

Data and Research Center: Regina Andrade¹; Melissa Basford¹; Dikshya Bastakoty¹; Robert Carroll¹; Brandy Mapes¹; Kelsey Mayo¹; David Mohs⁴; Karthik N Muthuraman¹⁶; Karthik Natarajan³; Andrea Ramirez¹; Jon Scherdin¹; Scott Sutherland²⁰; Keri Wolfe¹

Federally Qualified Health Centers: Elizabeth Lugo-Butler²⁶; Migdaliz Soto¹¹

Genome Centers: *Baylor Hopkins Center for Clinical Genomics*: Ginger Metcalf⁵²; Donna M. Muzny⁵²; *The Broad-LMM-Color Genome Center*: Cynthia Neben⁴; Alicia Zhou⁴; *Northwest Genomics Center*: Colleen P Davis²⁹; Chris Frazar²⁹; Christina M Lockwood²⁹; Colin C Pritchard²⁹; Brian H Shirts²⁹; Joshua D Smith²⁹

The Participant Center: Katie Baca-Motes³⁴; Erin Coughlin³⁴; Nick D'Addezio⁵³; Meg Doerr⁵⁰; Ben Greenberg³⁴; Dina Hamideh³⁴; Katie Harris³⁴; Tanya Hearne³⁴; Paula King³⁴; Andrew LeBlanc³⁴; Lara Mangravite⁵⁰; Julia Moore-Vogel³⁴; Danny Oran³⁴; Greg Orr¹⁹; Melissa Peters³⁴; Giorgio Quer³⁴; Mercedita Roxas-Murray⁵⁴; Gayle Simon³⁴; Christine Suver⁵⁰; Janet Villa³⁸; Laurie Wyatt⁵⁵

The Participant Technology Systems Center: Jason Cao²⁰; Meghan Bauman²⁰; Mark Begale²⁰; Neeta Jain²⁰; Dave Klein²⁰; Josh Schilling²⁰; Scott Sutherland²⁰; Chris Warfield²⁰

Regional Medical Centers: *All of Us New England*: William Adams⁴⁷; Nicole Allen⁵; Tracy Battaglia⁴⁷; Natalie Boutin⁵; Natalie Butler⁴⁷; Cheryl Clark⁵⁶; Julien Dedier⁴⁷; Susan Edgman-Levitan⁵⁷; Robert Green⁵⁶; Jonathan Jackson⁵; Cheryl McCloud⁴⁷; Ashley Mici⁵⁶; Nyryan Nolido⁵⁶; Penny Price⁴⁷; Carolina Stamoulos⁴⁷; Stephen Tringale⁴⁷; Dean Xerras⁵⁷; *All of Us Wisconsin*: Tricia Denman⁴³; Kristyn Ertl⁴⁹; Mackenzie Francisco⁷; Zeno Franco⁴⁹; Gina Green-

Harris⁴³; Jennifer Koney⁴⁹; Lisa Kunst⁷; Dessie Levy⁴⁹; Sarah Longenecker⁴⁹; Marje Murray⁴³; David Nelson⁴⁹; Peggy Peissig⁷; Rob Strenn⁷; Umberto Tachanardi⁴³; Brad Taylor⁴⁹; Gil White⁵⁸; *California Precision Medicine Consortium*: Alexander Borowsky⁵⁹; John Billimek⁴²; Steven Chessler⁴²; Emily Dow⁴²; Rob E. El-Kareh²⁸; Marc Goodman⁶⁰; Robert Hiatt⁶¹; Michael A. Hogarth²⁸; Katherine Kim⁵⁹; Elena Martinez²⁸; Daniella Meeker⁶²; Ryan J. Moran²⁸; Hannah Park⁴²; Siddharth Singh²⁸; Amy M. Sitapati²⁸; Spencer Soohoo⁶⁰; Kai Zheng⁴²; Argyrios Ziogas⁴²; *Illinois Precision Medicine Consortium*: Maria Argos¹³; Brisa Aschebrook-Kilfoy⁴¹; Marcelo Bento Soares⁶³; Pablo V. Gejman⁶⁴; Suzanne Hambright¹³; Joyce Ho¹⁸; Karen E Kim⁴¹; Alan R. Sanders⁶⁴; David J. Sedillo⁶⁵; Elizabeth Stepniak⁴¹; *New York City Precision Medicine Consortium*: Louise Bier³; Jekolbi Brown⁴⁸; Elizabeth Cohn³; Catherine Freeland³; Kelly Williams⁴⁶; *SouthEast Enrollment Center*: Lisa Abreu⁴⁰; Alvaro Alonso⁵⁰; Chadrick Anderson⁶⁶; Cindy Delgado⁴⁰; Nita N. Deshpande⁵⁰; Eileen Handberg⁴⁴; Rosario Isasi⁴⁰; Theodore M. Johnson II⁵⁰; H. Richard Johnston⁵⁰; Greg S. Martin⁵⁰; Atuarra McCaslin⁴⁵; Jacob McCauley⁴⁰; Robert Meller⁴⁵; Howard Mosby⁶⁶; Elizabeth Olorundare⁴⁵; Andrew R. Post⁵⁰; Alexander Quarshie⁴⁵; Arshed A. Quyyumi⁵⁰; Tracie C. Rosser⁵⁰; Brittney Roth⁴⁴; Sonya White⁴⁴; *Southern Network*: Aras Acemgil⁶⁷; Errol Crook⁶⁸; James Cimino²⁴; Vivian Fonseca⁶⁹; Jewell Halanych²⁴; Shaila Handattu²⁴; John Higginbotham⁷⁰; Kathy King²⁴; Sara Knight²⁴; Tiffani Maycock²⁴; Lucio Miele⁷¹; Allen Perkins⁶⁸; Sandra Roberts²⁴; Julie Schach²⁴; Roger Smalligan²⁴; Richard Summers⁷²; Stephanie Tanner⁷²; Thomas Weida⁷⁰; *Trans-American Consortium for the Health Care Systems Research Network*: Jodi Bohnhorst⁷³; David Chesla⁷³; Mara Epstein⁷⁴; Giovanni Fillardo⁷⁵; Larry Garber⁷⁴; Christine Joseph²²; Karen Kippen²²; Kathleen Mazor⁷⁴; Daniel McLaren²²; Cathryn Peltz²²; Teresa Phan⁷⁵; Allise Taran⁷⁶; Steve Waring⁷⁶; Joann Wagner⁷⁴; Renee Williams²²; *University of Arizona*: Elizabeth Calhoun³⁰; Titi Ilori³⁰; Jason Karnes³⁰; Francisco Moreno³⁰; Tammy Ojo³⁰; Rachele Peterson³⁰; Cecilia Rosales³⁰; Amanda Sokan³⁰; *University of Pittsburgh*: Becky Baldwin³²; Philip Empey³²; Michelle Labrinidis³²; Kristin Lazzara³²; Mylynda Massart³²; David Mathias³²; Margaret Palumbo³²; Laurel Yasko³²; William Young³²

U.S. Department of Veterans Affairs: Lori Churby²⁷; Rona Relova²⁷; Sherilyn Sawyer²⁷; Fatima Shahzad²⁷

Leidos: Brian L Florence⁷⁷; Heather M Sansbury⁷⁷; Peter Scully⁷⁷; Isabelle Bisceglia⁷⁷

Affiliations: ¹Vanderbilt University; ²National Institutes of Health; ³Columbia University Irving Medical Center; ⁴Broad Institute; ⁵Partners Healthcare System; ⁶Baylor University; ⁷Marshfield Clinic Research Institute; ⁸Abyssinian Baptist Church; ⁹All of Us Research Program; ¹⁰Hungry Heart Media, Inc. (Wondros); ¹¹Community Health Center; ¹²HRHCare; ¹³University of Illinois at Chicago; ¹⁴National Alliance for Hispanic Health; ¹⁵FiftyForward; ¹⁶Verily Life Sciences; ¹⁷The MITRE Corporation; ¹⁸Northwestern University; ¹⁹Walgreens; ²⁰Vibrent Health; ²¹Jackson-Hinds Comprehensive Health Center; ²²Henry Ford Health System; ²³Cherokee Health Systems; ²⁴University of Alabama at Birmingham; ²⁵Stanford University School of Medicine; ²⁶San Ysidro Health; ²⁷U.S. Department of Veterans Affairs; ²⁸University of California, San Diego; ²⁹University of Washington; ³⁰University of Arizona; ³¹Asian Health Coalition; ³²University of Pittsburgh; ³³Cooperative Health (formerly known as Eau Claire Cooperative Health Center); ³⁴Scripps

Research Institute; ³⁵HCM Strategists LLC; ³⁶Mayo Clinic; ³⁷Delta Research and Educational Foundation; ³⁸San Diego Blood Bank; ³⁹National Library of Medicine; ⁴⁰University of Miami School of Medicine; ⁴¹University of Chicago; ⁴²University of California, Irvine; ⁴³University of Wisconsin-Madison; ⁴⁴University of Florida; ⁴⁵Morehouse School of Medicine; ⁴⁶Weill Cornell Medical College; ⁴⁷Boston Medical Center Corporation; ⁴⁸NYC Health + Hospitals/Harlem ; ⁴⁹Medical College of Wisconsin; ⁵⁰Emory University; ⁵¹Johns Hopkins University School of Medicine; ⁵²Baylor College of Medicine; ⁵³Blue Cross Blue Shield Association; ⁵⁴Montage Marketing Group; ⁵⁵DXC Technology; ⁵⁶Brigham and Women's Hospital; ⁵⁷Massachusetts General Hospital; ⁵⁸BloodCenter of Wisconsin; ⁵⁹University of California, Davis; ⁶⁰Cedars-Sinai Medical Center; ⁶¹University of California, San Francisco; ⁶²University of Southern California; ⁶³University of Illinois College of Medicine at Peoria; ⁶⁴NorthShore University HealthSystem; ⁶⁵Rush University Medical School; ⁶⁶Grady Health System; ⁶⁷University of Alabama in Huntsville; ⁶⁸University of South Alabama; ⁶⁹Tulane University; ⁷⁰University of Alabama, Tuscaloosa; ⁷¹Louisiana State University; ⁷²University of Mississippi Medical Center; ⁷³Spectrum Health System; ⁷⁴University of Massachusetts/ Reliant Medical Group; ⁷⁵Baylor Scott and White Health System; ⁷⁶Essentia Health System; ⁷⁷Leidos

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Table S1: Estimated baseline prevalences and incidences of disease conditions in one million people.

These data are taken from the Precision Medicine Initiative (PMI) Working Group Report to the Advisory Committee to the Director and were derived from individuals volunteering to large-scale EHR biobanks in the NHGRI Electronic Medical Records and Genomics (eMERGE) Network.¹ As these case estimates derived from longitudinally followed patients at large academic healthcare systems, they may represent sicker populations than enrolling in *All of Us*.

Disease	Estimated prevalent cases	Estimated incident cases		Total in 10 years
		5 years	10 years	
Essential hypertension	360,794	99,963	231,165	591,959
Type 2 Diabetes	135,658	40,411	94,493	230,151
Depression	110,091	40,133	91,893	201,984
Atrial fibrillation	78,272	35,047	56,292	134,564
Chronic renal failure	74,700	28,944	49,926	124,626
Congestive heart failure	73,723	21,315	40,322	114,045
Asthma	62,149	17,292	44,036	106,185
COPD	48,728	15,396	33,584	82,312
Rheumatoid arthritis	45,835	11,466	23,875	69,710
Myocardial infarction	39,273	14,981	27,112	66,385
Epilepsy	33,426	4,161	11,248	44,674
Thrombosis	26,746	11,559	21,169	47,915
Breast cancer (female)	20,470	12,068	21,382	41,852
Stroke	16,016	8,969	15,598	31,614
Lupus	14,659	3,283	6,738	21,397
Prostate cancer	13,861	6,241	13,848	27,709
Dementia	13,373	7,028	9,656	23,029
Lung cancer	11,432	2,866	4,828	16,260
Colorectal cancer	9,407	3,745	6,844	16,251
Abdominal aortic aneurysms	8,729	2,451	5,518	14,247
Melanoma	6,109	2,727	3,873	9,982
Parkinson's disease	4,311	2,127	4,032	8,343

¹Precision Medicine Initiative (PMI) Working Group Report to the Advisory Committee to the Director. The Precision Medicine Initiative Cohort Program – Building a Research Foundation for 21st Century Medicine [Internet]. 2015 [cited 2019 May 31]; Available from: <http://www.nih.gov/precisionmedicine/09172015-pmi-working-group-report.pdf>.

Table S2: List of Healthcare Provider Organizations as of 2019.

Regional Medical Centers

- U.S. Department of Veterans Affairs Medical Centers
- *All of Us* Wisconsin
 - Marshfield Clinic Research Institute
 - BloodCenter of Wisconsin, Milwaukee
 - Medical College of Wisconsin, Milwaukee
 - University of Wisconsin School of Medicine and Public Health in Madison
- California Precision Medicine Consortium
 - University of California San Diego (lead)
 - Cedars-Sinai Medical Center, Los Angeles
 - San Diego Blood Bank
 - University of California, Davis
 - University of California, Irvine
 - University of California, San Francisco
 - University of Southern California, Los Angeles
- Illinois Precision Medicine Consortium
 - Northwestern University, Chicago
 - University of Chicago
 - University of Illinois at Chicago
 - NorthShore University HealthSystem, Chicago
 - Rush University Medical Center, Chicago
- *All of Us* New England
 - Partners HealthCare System (lead) and its founding hospitals, Brigham and Women's Hospital and Massachusetts General Hospital
 - Boston Medical Center
 - Newton-Wellesley Hospital
 - Faulkner Hospital
 - McLean Hospital
- New York City Precision Medicine Consortium
 - Columbia University Medical Center, New York City (lead)
 - NYC Health + Hospitals/Harlem, New York City
 - NewYork-Presbyterian, New York City
 - Weill Cornell Medicine, New York City
- Southern *All of Us* Network
 - University of Alabama at Birmingham (UAB)
 - Cooper Green Mercy Health Services, Birmingham, Alabama
 - Huntsville Hospital, Alabama
 - Louisiana State University Health Sciences Center, New Orleans
 - Tulane Medical Center, New Orleans
 - Tuskegee University, Alabama
 - UAB Hospital, Birmingham, Alabama

- UAB School of Medicine's Montgomery Internal Medicine and Selma Family Medicine programs, Birmingham, Alabama
- University of Mississippi Medical Center, Jackson
- University of South Alabama Health System, Mobile
- University Medical Center, Tuscaloosa, Alabama
- SouthEast Enrollment Center
 - University of Miami Miller School of Medicine, Florida
 - Emory University, Atlanta
 - Morehouse School of Medicine, Atlanta
 - OneFlorida Clinical Research Consortium led by the University of Florida in Gainesville
- Trans-American Consortium for the Health Care Systems Research Network
 - Henry Ford Health System, Detroit (lead)
 - Baylor Scott and White Health, Dallas
 - Spectrum Health, Grand Rapids, Michigan
 - Essentia Institute of Rural Health, Minnesota
 - Reliant Medical Group/University of Massachusetts, Massachusetts
- University of Arizona, Tucson
 - Banner Health, Phoenix
- *All of Us* Pennsylvania
 - University of Pittsburgh / University of Pittsburgh Medical Center, Pittsburgh
 - Temple University, Philadelphia

Federally Qualified Health Centers

- Cherokee Health Systems, Knoxville, Tennessee
- Community Health Center, Inc., Middletown, Connecticut
- Eau Claire Cooperative Health Center, Columbia, South Carolina
- HRHCare, Peekskill, New York
- Jackson-Hinds Comprehensive Health Center, Jackson, Mississippi
- San Ysidro Health, San Ysidro, California

Table S3: Initial sample collection protocols.

The samples collected will continue to evolve, and we expect we may collect additional samples in the future. The protocol and samples collected are available at <http://researchallofus.org>.

Initial sample collection protocol during Beta:

Type of sample and collection tube	Volume collected (mL)	Fraction
Blood		
Clot activator (SST)	8.5	Serum
Plasma separator (PST)	8	Plasma
Na-heparin	4	Whole blood (+DMSO)
EDTA	4	DNA
EDTA x 2	10	(10ml) Plasma (2ml) WBC (4ml) RBC (+glycerol)
Urine	10	
Saliva (backup)	2	DNA

Current sample collection protocol:

Type of sample and collection tube	Volume collected (mL)	Fraction
Blood		
Clot activator (SST)	8.5	Serum
Plasma separator (PST)	8	Plasma
Na-heparin	4	Whole blood (+DMSO)
EDTA	4	DNA
EDTA	10	(5ml) Plasma (1ml) WBC (2ml) RBC (+glycerol)
cf DNA	9	Plasma
PAXgene (RNA)	2.5	RNA
Urine	10	
Saliva (backup)	2	DNA