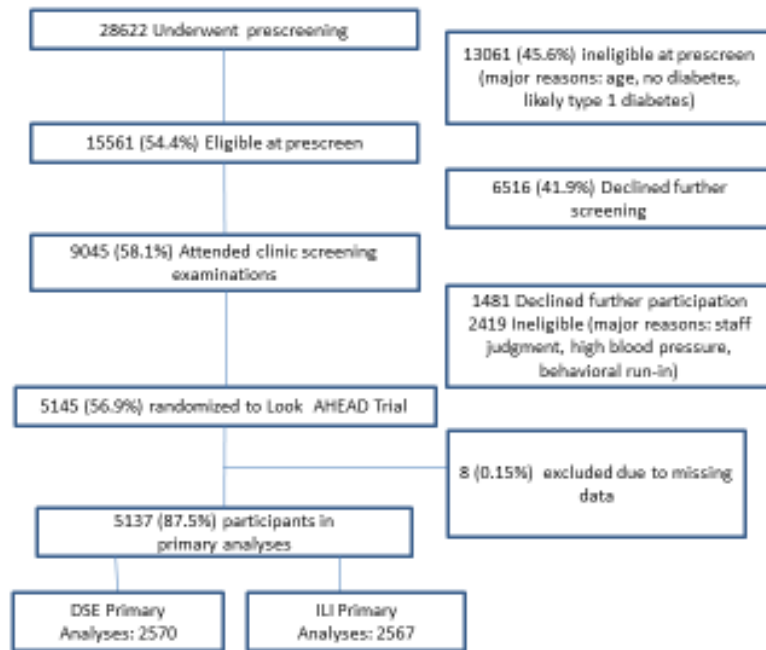
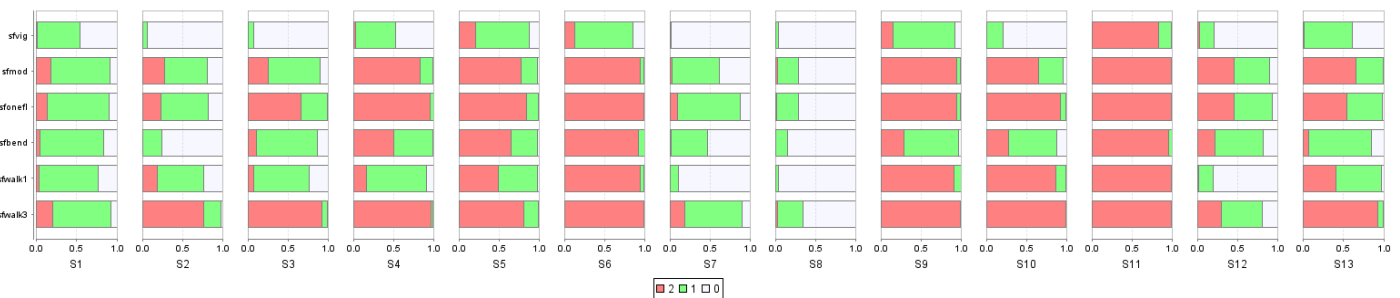


SUPPLEMENTARY DATA

**Supplementary Figure 1.** Flow diagram for analyses of impact of Intensive lifestyle intervention on disability-free life expectancy: The

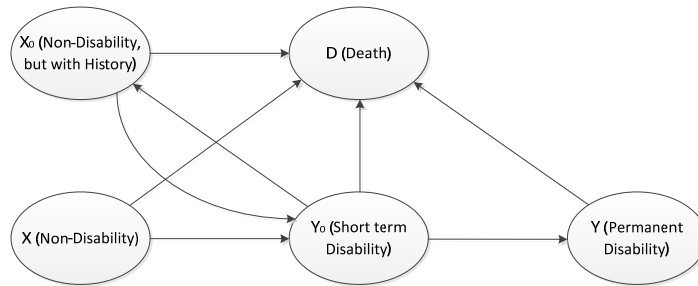


**Supplementary Figure 2.** Prevalence of limitations for each level of each activity, aggregated over the full follow-up period, for each of the 13 derived states.

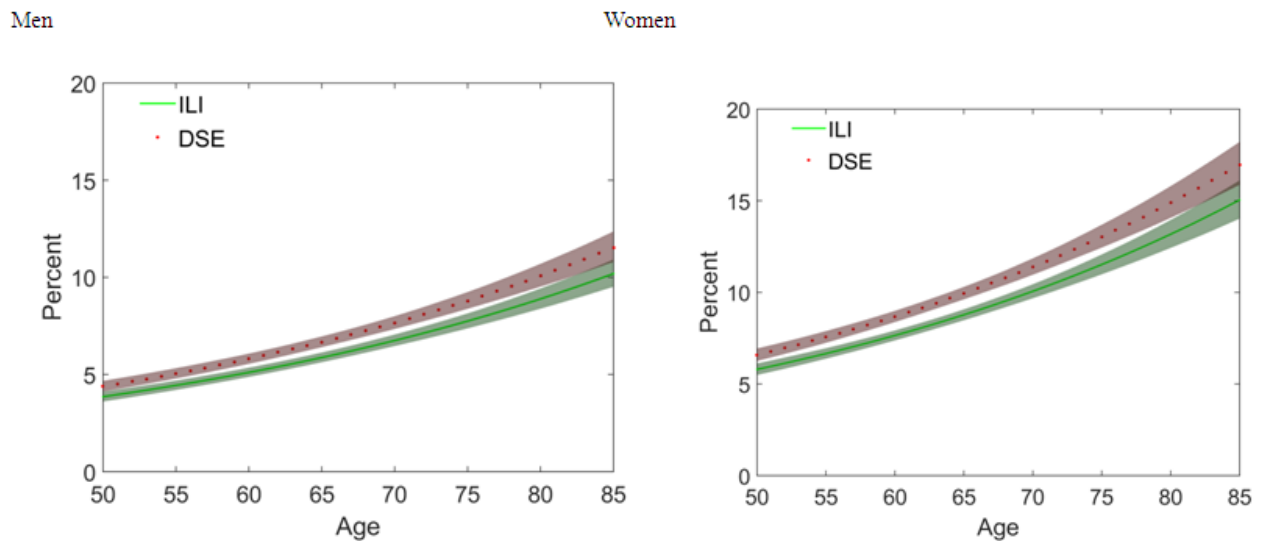


SUPPLEMENTARY DATA

**Supplementary Figure 3: Modeling Approach for Markov Model for estimation of Disabled and non-disabled Life Years**

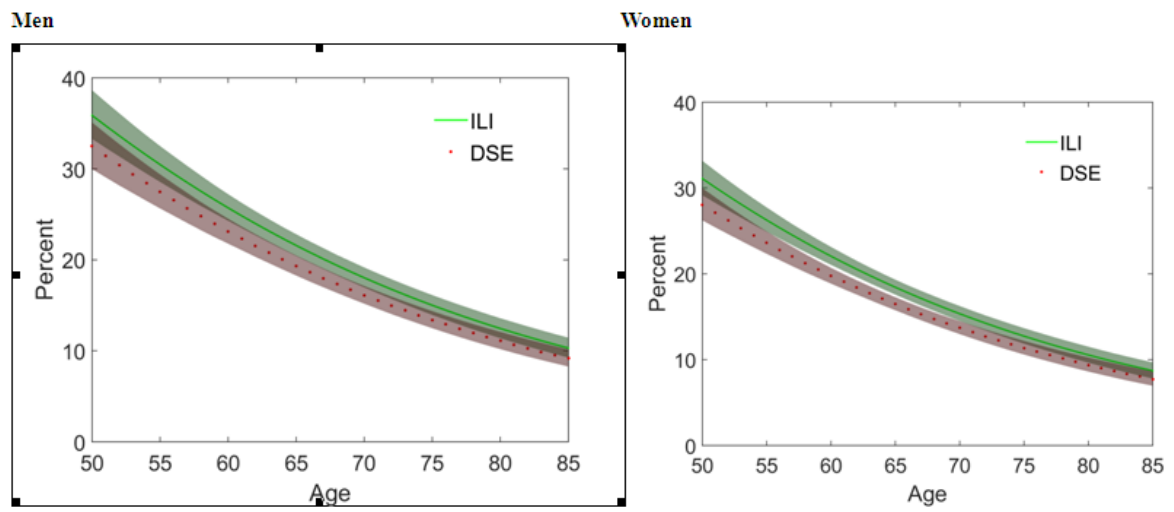


**Appendix Figure 4. Incidence of disability (moderate or severe), modeled across age, by sex and intervention status: The Look AHEAD Study.**



SUPPLEMENTARY DATA

**Supplementary Figure 5. Incidence of remission from disability, modeled across age, by sex and intervention status: The Look AHEAD Study.**



SUPPLEMENTARY DATA

**Supplementary Results Table 1: Baseline Characteristics According to Intervention Status.**

<b>Characteristics</b>	<b>DSE</b>	<b>ILI</b>	<b>P value</b>
Number	2570	2567	-
Age, mean (SD), y	58.9 (6.9)	58.6 (6.8)	0.12
Male, No. (%)	40.4	40.6	0.86
Race / ethnicity (%)			0.93
African American	15.7	15.6	
American Indian	4.9	5.0	
Asian/Pacific Islander/Other	0.8	1.1	
Hispanic	13.2	13.3	
White	63.4	63.1	
Other	2.0	1.9	
Education (%)			0.64
< 13 years	20.5	20.2	
13 to < 16 years	38.5	37.5	
> 16 years	41.0	42.3	
CVD History No. (%)	13.5	14.3	0.45
Diabetes Medications: No. (%)			
None	12.1	12.8	0.50
Orals alone	68.4	68.5	0.95
Any insulin	19.4	18.7	0.51
Diabetes Duration, median (IQR), y	6.9 (2,10)	6.7 (2,10)	0.14
BMI, mean (SD), kg/m <sup>2</sup>	36.0 (31.7,39.4)	35.9 (31.4, 39.5)	0.28
Baseline Mobility Disability Prevalence			
None (%)	85.0	86.2	0.21
Some or Severe (%)	15.1	13.8	
Severe (%)	3.8	2.8	0.04

\*BMI: Body mass index ; CVD: Prior cardiovascular disease included history of myocardial infarction, coronary artery bypass, angioplasty/stent procedures, peripheral vascular disease, stroke, stable angina, and class I /II heart failure. \*p<0.001; □ p<0.01 § p<0.05 for comparison between intensive lifestyle intervention and diabetes support and education groups

## SUPPLEMENTARY DATA

### Look AHEAD Research Group at End of Continuation

#### Clinical Sites

The Johns Hopkins University Frederick L. Brancati, MD, MHS<sup>1\*</sup>; Jeanne M. Clark, MD, MPH<sup>1</sup> (Co-Principal Investigators); Lee Swartz<sup>2</sup>; Jeanne Charleston, RN<sup>3</sup>; Lawrence Cheskin, MD<sup>3</sup>; Richard Rubin, PhD<sup>3\*</sup>; Jean Arceci, RN; David Bolen; Danielle Diggins; Mia Johnson; Joyce Lambert; Sarah Longenecker; Kathy Michalski, RD; Dawn Jiggetts; Chanchai Sapun; Maria Sowers; Kathy Tyler

Pennington Biomedical Research Center George A. Bray, MD<sup>1</sup>; Allison Strate, RN<sup>2</sup>; Frank L. Greenway, MD<sup>3</sup>; Donna H. Ryan, MD<sup>3</sup>; Donald Williamson, PhD<sup>3</sup>; Timothy Church, MD<sup>3</sup>; Catherine Champagne, PhD, RD; Valerie Myers, PhD; Jennifer Arceneaux, RN; Kristi Rau; Michelle Begnaud, LDN, RD, CDE; Barbara Cerniauskas, LDN, RD, CDE; Crystal Duncan, LPN; Helen Guay, LDN, LPC, RD; Carolyn Johnson, LPN, Lisa Jones; Kim Landry; Missy Lingle; Jennifer Perault; Cindy Puckett; Marisa Smith; Lauren Cox; Monica Lockett, LPN

The University of Alabama at Birmingham Cora E. Lewis, MD, MSPH<sup>1</sup>; Sheikilya Thomas, PhD, MPH<sup>2</sup>; Monika Safford, MD<sup>3</sup>; Stephen Glasser, MD<sup>3</sup>; Vicki DiLillo, PhD<sup>3</sup>; Gareth Dutton, PhD, Charlotte Bragg, MS, RD, LD; Amy Dobelstein; Sara Hannum; Anne Hubbell, MS; Jane King, MLT; DeLavallade Lee; Andre Morgan; L. Christie Oden; Janet Wallace, MS; Cathy Roche, PhD, RN, BSN; Jackie Roche; Janet Turman

#### Harvard Center

*Massachusetts General Hospital.* David M. Nathan, MD<sup>1</sup>; Enrico Cagliero, MD<sup>3</sup>; Heather Turgeon, RN, BS, CDE<sup>2</sup>; Barbara Steiner, EdM; Valerie Goldman, MS, RDN<sup>2</sup>; Linda Delahanty, MS, RDN<sup>3</sup>; Ellen Anderson, MS, RDN<sup>3</sup>; Laurie Bissett, MS, RDN; Christine Stevens, RN; Mary Larkin, RN; Kristen Dalton, BS, Roshni Singh, BS

*Joslin Diabetes Center:* Edward S. Horton, MD<sup>1</sup>; Sharon D. Jackson, MS, RD, CDE<sup>2</sup>; Osama Hamdy, MD, PhD<sup>3</sup>; A. Enrique Caballero, MD<sup>3</sup>; Sarah Bain, BS; Elizabeth McKinney, BSN, RN; Barbara Fargnoli, MSRD; Jeanne Spellman, BS, RD; Kari Galuski, RN; Ann Goebel-Fabbri, PhD; Lori Lambert, MS, RD; Sarah Ledbury, MED, RD; Maureen Malloy, BS; Kerry Ovalle, MS, RCEP, CDE

*Beth Israel Deaconess Medical Center:* George Blackburn, MD, PhD<sup>1</sup>; Christos Mantzoros, MD, DSc<sup>3</sup>; Ann McNamara, RN

University of Colorado Anschutz Medical Campus James O. Hill, PhD<sup>1</sup>; Marsha Miller, MS RD<sup>2</sup>; Holly Wyatt, MD<sup>3</sup>; Brent Van Dorsten, PhD<sup>3</sup>; Judith Regensteiner, PhD<sup>3</sup>; Debbie Bochert; Gina Claxton-Malloy RD Ligia Coelho, BS; Paulette Cohrs, RN, BSN; Susan Green; April Hamilton, BS, CCRC; Jere Hamilton, BA; Eugene Leshchinskiy; Loretta Rome, TRS; Terra Thompson, BA, Kirstie Craul, RD, CDE; Cecilia Wang, MD

Baylor College of Medicine John P. Foreyt, PhD<sup>1</sup>; Rebecca S. Reeves, DrPH, RD<sup>2</sup>; Molly Gee, MED, RD<sup>2</sup>; Henry Pownall, PhD<sup>3</sup>; Ashok Balasubramanyam, MBBS<sup>3</sup>; Chu-Huang Chen, MD, PhD<sup>3</sup>; Peter Jones, MD<sup>3</sup>; Michele Burrington, RD, RN; Allyson Clark Gardner, MS, RD; Sharon Griggs; Michelle Hamilton; Veronica Holley; Sarah Lee; Sarah Lane Liscum, RN, MPH; Susan Cantu-Lumbreras; Julieta Palencia, RN; Jennifer Schmidt; Jayne Thomas, RD; Carolyn White; Charlyne Wright, RN; Monica Alvarez, PCT

#### The University of Tennessee Health Science Center

## SUPPLEMENTARY DATA

*University of Tennessee East.* Karen C. Johnson, MD, MPH<sup>1</sup>; Karen L. Wilson, BSN<sup>□</sup>; Mace Coday, PhD<sup>3</sup>; Beate Griffin, RN, BS; Donna Valenski; Polly Edwards; Brenda Fonda; Kim Ward

*University of Tennessee Downtown.* Helmut Steinburg, MD<sup>3</sup>; Carolyn Gresham, BSN<sup>□</sup>; Moana Mosby, RN; Debra Clark, LPN; Donna Green RN; Abbas E. Kitabchi, PhD, MD\*

University of Minnesota Robert W. Jeffery, PhD<sup>1</sup>; Tricia Skarphol, MA<sup>2</sup>; John P. Bantle, MD<sup>3</sup>; J. Bruce Redmon, MD<sup>3</sup>; Richard S. Crow, MD<sup>3</sup>; Scott J. Crow, MD<sup>3</sup>; Manami Bhattacharya, BS; Cindy Bjerk, MS, RD; Kerrin Brelje, MPH, RD; Carolyne Campbell; Mary Ann Forseth, BA; Melanie Jaeb, MPH, RD; Philip Lacher, BBA; Patti Laqua, BS, RD; Birgitta I. Rice, MS, RPh, CHES; Ann D. Tucker, BA; Mary Susan Voeller, BA

St. Luke's Roosevelt Hospital Center Xavier Pi-Sunyer, MD<sup>1</sup>; Jennifer Patricio, MS<sup>2</sup>; Carmen Pal, MD<sup>3</sup>; Lynn Allen, MD; Janet Crane, MA, RD, CDN; Lolline Chong, BS, RD; Diane Hirsch, RNC, MS, CDE; Mary Anne Holowaty, MS, CN; Michelle Horowitz, MS, RD; Raashi Mamtani, MS

University of Pennsylvania Thomas A. Wadden, PhD<sup>1</sup>; Barbara J. Maschak-Carey, MSN, CDE<sup>2</sup>; Robert I. Berkowitz, MD<sup>3</sup>; Gary Foster, PhD<sup>3</sup>; Henry Glick, PhD<sup>3</sup>; Shiriki Kumanyika, PhD RD, MPH<sup>3</sup>; Yuliis Bell, BA; Raymond Carvajal, PsyD; Helen Chomentowski; Renee Davenport; Lucy Faulconbridge, PhD; Louise Hesson, MSN, CRNP; Sharon Leonard, RD; Monica Mullen, RD, MPH

University of Pittsburgh John M. Jakicic, PhD<sup>1</sup>; David E. Kelley, MD<sup>1</sup>; Jacqueline Wesche-Thobaben, RN, BSN, CDE<sup>2</sup>; Daniel Edmundowicz, MD<sup>3</sup>; Lin Ewing, PhD, RN<sup>3</sup>; Andrea Hergenroeder, PhD, PT, CCS<sup>3</sup>; Mary L. Klem, PhD, MLIS<sup>3</sup>; Mary Korytkowski, MD<sup>3</sup>; Andrea Kriska, PhD<sup>3</sup>; Lewis H. Kuller, MD, DrPH<sup>3</sup>; Amy D. Rickman, PhD, RD, LDN<sup>3</sup>; Rose Salata, MD<sup>3</sup>; Monica E. Yamamoto, DrPH, RD, FADA<sup>3</sup>; Janet Bonk, RN, MPH; Susan Copelli, BS, CTR; Rebecca Danchenko, BS; Tammy DeBruce, BA; Barbara Elnyczky; David O. Garcia, PhD; George A. Grove, MS; Patricia H. Harper, MS, RD, LDN; Susan Harrier, BS; Diane Heidingsfelder, MS, RD, CDE, LDN; Nicole L. Helbling, MS, RN; Diane Ives, MPH; Janet Krulia, RN, BSN, CDE; Juliet Mancino, MS, RD, CDE, LDN; Anne Mathews, PhD, RD, LDN; Lisa Martich, BS, RD, LDN; Meghan McGuire, MS; Tracey Y. Murray, BS; Anna Peluso, MS; Karen Quirin; Jennifer Rush, MPH; Joan R. Ritchea; Linda Semler, MS, RD, LDN; Karen Vujevich, RN-BC, MSN, CRNP; Kathy Williams, RN, MHA; Donna L. Wolf, PhD

The Miriam Hospital/Brown Medical School Rena R. Wing, PhD<sup>1</sup>; Renee Bright, MS<sup>2</sup>; Vincent Pera, MD<sup>3</sup>; Deborah Tate, PhD<sup>3</sup>; Amy Gorin, PhD<sup>3</sup>; Kara Gallagher, PhD<sup>3</sup>; Amy Bach, PhD; Barbara Bancroft, RN, MS; Anna Bertorelli, MBA, RD; Richard Carey, BS; Tatum Charron, BS; Heather Chenot, MS; Kimberley Chula-Maguire, MS; Pamela Coward, MS, RD; Lisa Cronkite, BS; Julie Currin, MD; Maureen Daly, RN; Caitlin Egan, MS; Erica Ferguson, BS, RD; Linda Foss, MPH; Jennifer Gauvin, BS; Don Kieffer, PhD; Lauren Lessard, BS; Deborah Maier, MS; JP Massaro, BS; Tammy Monk, MS; Rob Nicholson, PhD; Erin Patterson, BS; Suzanne Phelan, PhD; Hollie Raynor, PhD, RD; Douglas Raynor, PhD; Natalie Robinson, MS, RD; Deborah Robles; Jane Tavares, BS

The University of Texas Health Science Center at San Antonio Helen P. Hazuda, PhD<sup>1</sup>; Maria G. Montez, RN, MSHP, CDE<sup>2</sup>; Carlos Lorenzo, MD<sup>3</sup>; Charles F. Coleman, MS, RD; Domingo Granado, RN; Kathy Hathaway, MS, RD; Juan Carlos Isaac, RC, BSN; Nora Ramirez, RN, BSN

VA Puget Sound Health Care System / University of Washington Steven E. Kahn, MB, ChB<sup>1</sup>; Anne Kure, BS<sup>2</sup>; Edward J. Boyko, MD, MPH<sup>3</sup>; Edward Lipkin, MD, PhD<sup>3</sup>; Dace Trence, MD<sup>3</sup>; Subbulaxmi

## SUPPLEMENTARY DATA

Trikudanathan, MD, MRCP, MMSc<sup>3</sup>; Elaine Tsai, MD<sup>3</sup>; Brenda Montgomery, RN, MS, CDE; Ivy Morgan-Taggart; Jolanta Socha, BS; Lonnesse Taylor, RN, BS; Alan Wesley, BA

Southwestern American Indian Center, Phoenix, Arizona and Shiprock, New Mexico William C. Knowler, MD, DrPH<sup>1</sup>; Paula Bolin, RN, MC<sup>2</sup>; Tina Killean, BS<sup>2</sup>; Maria Cassidy-Begay, BSND, RND<sup>2</sup>; Katie Toledo, MS, LPC<sup>2</sup>; Cathy Manus, LPN<sup>3</sup>; Jonathan Krakoff, MD<sup>3</sup>; Jeffrey M. Curtis, MD, MPH<sup>3</sup>; Sara Michaels, MD<sup>3</sup>; Paul Bloomquist, MD<sup>3</sup>; Peter H. Bennett, MB, FRCP<sup>3</sup>; Bernadita Fallis, RN, RHIT, CCS; Diane F. Hollowbreast; Ruby Johnson; Maria Meacham, BSN, RN, CDE; Christina Morris, BA; Julie Nelson, RD; Carol Percy, RN, MS; Patricia Poorthunder; Sandra Sangster; Leigh A. Shovestull, RD, CDE; Miranda Smart; Janelia Smiley; Teddy Thomas, BS

University of Southern California Anne Peters, MD<sup>1</sup>; Siran Ghazarian, MD<sup>2</sup>; Elizabeth Beale, MD<sup>3</sup>; Kati Konersman, RD, CDE; Brenda Quintero-Varela; Edgar Ramirez; Gabriela Rios, RD; Gabriela Rodriguez, MA; Valerie Ruelas MSW, LCSW; Sara Serafin-Dokhan; Martha Walker, RD

### Coordinating Center

Wake Forest University Mark A. Espeland, PhD<sup>1</sup>; Judy L. Bahnson, BA, CCRP<sup>3</sup>; Lynne E. Wagenknecht, DrPH<sup>1</sup>; David Reboussin, PhD<sup>3</sup>; W. Jack Rejeski, PhD<sup>3</sup>; Alain G. Bertoni, MD, MPH<sup>3</sup>; Wei Lang, PhD<sup>3</sup>; David Lefkowitz, MD<sup>3\*</sup>; Patrick S. Reynolds, MD<sup>3</sup>; Denise Houston, PhD<sup>3</sup>; Mike E. Miller, PhD<sup>3</sup>; Laura D. Baker, PhD<sup>3</sup>; Nicholas Pajewski, PhD<sup>3</sup>; Stephen R. Rapp, PhD<sup>3</sup>; Stephen Kritchevsky, PhD<sup>3</sup>; Haiying Chen, PhD, MM<sup>3</sup>; Valerie Wilson, MD<sup>3</sup>; Delia S. West, PhD<sup>3</sup>; Ron Prineas, MD<sup>3</sup>; Tandaw Samdarshi, MD<sup>3</sup>; Amelia Hodges, BS, CCRP<sup>2</sup>; Karen Wall<sup>2</sup>; Carrie C. Williams, MA, CCRP<sup>2</sup>; Andrea Anderson, MS; Jerry M. Barnes, MA; Tara D. Beckner; Delilah R. Cook; Valery S. Effoe, MD, MS; Melanie Franks, BBA; Katie Garcia, MS; Sarah A. Gaussoin, MS; Candace Goode; Michelle Gordon, MS; Lea Harvin, BS; Mary A. Hontz, BA; Don G. Hire, BS; Patricia Hogan, MS; Mark King, BS; Kathy Lane, BS; Rebecca H. Neiberg, MS; Julia T. Rushing, MS; Debbie Steinberg, BS; Jennifer Walker, MS; Michael P. Walkup, MS

### Central Resources Centers

Central Laboratory, Northwest Lipid Metabolism and Diabetes Research Laboratories Santica M. Marcovina, PhD, ScD<sup>1</sup>; Jessica Hurting<sup>2</sup>; John J. Albers, PhD<sup>3</sup>; Vinod Gaur, PhD<sup>4</sup>

ECG Reading Center, EPICARE, Wake Forest University School of Medicine

Elsayed Z. Soliman MD, MSc, MS<sup>1</sup>; Charles Campbell<sup>2</sup>; Zhu-Ming Zhang, MD<sup>3</sup>; Mary Barr; Susan Hensley; Julie Hu; Lisa Keasler; Yabing Li, MD

Hall-Foushee Communications, Inc.

Richard Foushee, PhD; Nancy J. Hall, MA

### Federal Sponsors

National Institute of Diabetes and Digestive and Kidney Diseases Mary Evans, PhD; Van S. Hubbard, MD, PhD; Susan Z. Yanovski, MD

National Heart, Lung, and Blood Institute Lawton S. Cooper, MD, MPH; Peter Kaufman, PhD, FABMR; Mario Stylianou, PhD

Centers for Disease Control and Prevention Edward W. Gregg, PhD; Ping Zhang, PhD

## SUPPLEMENTARY DATA

### **Funding and Support**

Funded by the National Institutes of Health through cooperative agreements with the National Institute of Diabetes and Digestive and Kidney Diseases: DK57136, DK57149, DK56990, DK57177, DK57171, DK57151, DK57182, DK57131, DK57002, DK57078, DK57154, DK57178, DK57219, DK57008, DK57135, and DK56992. Additional funding was provided by the National Heart, Lung, and Blood Institute; National Institute of Nursing Research; National Center on Minority Health and Health Disparities; NIH Office of Research on Women's Health; and the Centers for Disease Control and Prevention. This research was supported in part by the Intramural Research Program of the National Institute of Diabetes and Digestive and Kidney Diseases. The Indian Health Service (I.H.S.) provided personnel, medical oversight, and use of facilities. The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the I.H.S. or other funding sources.

Additional support was received from The Johns Hopkins Medical Institutions Bayview General Clinical Research Center (M01RR02719); the Massachusetts General Hospital Mallinckrodt General Clinical Research Center and the Massachusetts Institute of Technology General Clinical Research Center (M01RR01066); the Harvard Clinical and Translational Science Center (RR025758-04); the University of Colorado Health Sciences Center General Clinical Research Center (M01RR00051) and Clinical Nutrition Research Unit (P30 DK48520); the University of Tennessee at Memphis General Clinical Research Center (M01RR0021140); the University of Pittsburgh General Clinical Research Center (GCRC) (M01RR000056), the Clinical Translational Research Center (CTRC) funded by the Clinical & Translational Science Award (UL1 RR 024153) and NIH grant (DK 046204); the VA Puget Sound Health Care System Medical Research Service, Department of Veterans Affairs; and the Frederic C. Bartter General Clinical Research Center (M01RR01346).

The following organizations have committed to make major contributions to Look AHEAD: FedEx Corporation; Health Management Resources; LifeScan, Inc., a Johnson & Johnson Company; OPTIFAST® of Nestle HealthCare Nutrition, Inc.; Hoffmann-La Roche Inc.; Abbott Nutrition; and Slim-Fast Brand of Unilever North America.

Some of the information contained herein was derived from data provided by the Bureau of Vital Statistics, New York City Department of Health and Mental Hygiene.

---

<sup>1</sup> Principal Investigator

<sup>2</sup> Program Coordinator

<sup>3</sup> Co-Investigator

All other Look AHEAD staffs are listed alphabetically by site.

\*Deceased