

PainScript Corporation

Med-eXpert System Scientific Validation
In Nine Government Funded Programs
Published in Multiple Peer-Reviewed Journals

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Med-eXpert/Med-eMonitor - Scientific Validation

Summary of Nine Government Funded Programs

- More than 98% satisfaction among caregivers,
- 97% satisfaction in patients with schizophrenia,
- 95% medication adherence rate in patients with schizophrenia,
- 94% medication adherence rate in patients with heart disease,
- 96% protocol adherence rate in patients with heart disease,
- 92% medication and protocol adherence rates in patients with diabetes,
- HbA1c reduced by 18.5% in three months, and 89.5% medication adherence rates in HIV+, drug abusing, mentally ill, near-homeless patients, and
- 90% medication adherence rate in senior citizens with diabetes, heart failure, and fifth or sixth grade education levels.

PainScript Solutions consistently achieve medication and care plan adherence rates of 90% or more across multiple chronic disease populations, as documented by academic medical center trials and peer-reviewed journal articles. Standard rates 50% or less.

Outcomes Research Using Real-Time Communications

Government Funded Research Programs Using Med-eXpert/Med-eMonitor

Disease State	Academic Center	Funding Source	# of Programs	# of Patients	Duration of Research Program	Medication Adherence Results	Care Plan Adherence Results	Presentations and Publications
HIV+ with drug abuse and severe mental illness	University of California, San Francisco	SBIR/STTR	1	76	Six months	89.5%	N/A	2008 International Association of Physicians in AIDS Care (IAPAC) , and submitted for publication
Stroke prevention using Coumadin (Warfarin) and automated lottery system	University of Pennsylvania	PA Tobacco Settlement, Aetna Foundation NHLBI	<i>Phase 1</i> <i>Phase 2</i> <i>Phase 3</i>	20 100 268	Six months	In first 20 patients, adherence increased from 78% to 97.7%	Out of range INRs decreased from 35% to 12%	Multiple lay publications and insurance company publications. Recent submission to Journal of American Medical Association (JAMA)

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Schizophrenia in "Wounded Warriors"	Baltimore Veterans Hospital	SBIR/STTR	1	22	Three months	The Med-eMonitor System provided for compliance enhancement with medications and protocols.	Ease of central evaluation by treating professionals, additional education, and reduced on-site evaluation	Feasibility of Using the Med-eMonitor System in Monitoring and Enhancing Research Protocol Compliance and Health Status in Schizophrenia," Drug Information Journal, 37 (281-289), 2003

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Disease State	Academic Center	Funding Source	# of Programs	# of Patients	Duration of Research Program	Medication Adherence Percentage	Care Plan Adherence Percentage	Presentations and Publications
Schizophrenia	University of Texas Health Science Center San Antonio	NIMH	Phase 1 Phase 2	20 120	One Year Three Years	94% in Phase 1 95% in first 69 patients in the two intervention groups in Phase 2	N/A	<p>“The Med-eMonitor™ for improving adherence to oral medication in schizophrenia”, Bendle S, Velligan DI, et.al:</p> <p>Schizophrenia Bulletin, 31(2): 519, 2005;</p> <p>International Congress of Schizophrenia Research 2005; “Intervention to Improve Adherence to Anti-psychotic Medication”, Velligan, DI, Weiden, PJ:</p> <p>Psychiatric Times, August 2006, Vol XXIII, No. 9 ;</p> <p><i>The Clinical Handbook of Schizophrenia</i></p>

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Congestive Heart Failure in a Veterans Population	Wayne State University, Detroit Veterans Hospital	NIH	1	18	Three Months	94%	96%, improved physical quality of life	<p>“Pilot Study of a Web-Based Compliance Monitoring Device For Patients with Congestive Heart Failure,” Artinian, N, Harden, J, et.al., Heart & Lung, 2003: 32, 226-233;</p> <p>“Telehealth as a Tool for Enhancing Care for Patients with Cardiovascular Disease” Artinian, N, Journal of Cardiovascular Nursing, Vol. 22, No.1, pp 25-31, 2007</p>

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Diabetes	St.Vincent/ University of Pennsylvania	Center for Healthy Aging/ Federal	1	20	Three Months	92%	HbA1c dropped 18.7% (p<.002)	“Remote Monitoring and Management of Rural Diabetic Patients Using a Web-based Medication Adherence/ePRO Monitoring Device” Farberow, B, Disease Management Congress, 2005
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Diabetes with Congestive Heart Failure (CHF)	XLHealth, a Medicare Advantage Chronic Care Management Company	Medicare/ XLHealth	1	153	One Year	90%	92%	<p>Medical Automation Conference, December 2008</p> <p>Co-presented with XLHealth at the Ninth Annual Population Health and Disease Management Colloquium, March 2009</p>

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Med-eXpert System/Med-eMonitor Additional Scientific Validation

<https://www.ncbi.nlm.nih.gov/pubmed/23086987>
(Schizophrenia - 2013)

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- <https://www.ncbi.nlm.nih.gov/pubmed/19102784>
(Stroke prevention - 2008)
-
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3930068/> (Psychiatric illness - 2010)
-
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4738867/> (Stroke prevention - 2012)

Med-eXpert System/Med-eMonitor Additional Scientific Validation

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2632258/> (Schizophrenia - 2006)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3193561/> (HIV/AIDS - 2012)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2706178/> (Patient care management - 2008)
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- <https://www.hsrd.research.va.gov/publications/es/p/PharmaAdherence.pdf> (Department of Veteran Affairs – Psychiatric illnesses - 2015)
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- http://store.samhsa.gov/shin/content/SMA15-4924/SMA15-4924_PT3.pdf (U.S. Department of Health and Human Services – “HHS” - 2015)
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- <https://innovation.cms.gov/Files/x/MIPCD-CME-Guidance.pdf> (Medicare Demonstration Program Group – “CMS” - 2011)

ADHERERX CORPORATION

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