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AWARDS BRIEF



## Achieving a common language: Assessment and decision-making for vulnerable populations

### Brant E. Fries, Ph.D., L.L.D. (h.c.)

Professor of health management and policy, U-M School of Public Health; Research professor, Institute of Gerontology, U-M Medical School; Chief, Health Systems Research, Veterans Affairs Ann Arbor Healthcare System, Geriatric Research, Education, and Clinical Center; President and Founder of interRAI

A leader in the fields of healthcare policy and assessment methodology, Dr. Fries has devoted his career to developing assessment measures to improve the care of vulnerable populations across a broad spectrum of healthcare settings. He applies science-driven methods to implement these data in decision-making from the clinical realm to policymaking arenas to improve the care of millions of individuals.

Dr. Fries' work focuses on assuring quality, designing effective payment systems and regulation, improving operational efficiency, and enabling effective financing and policy decisions. The assessment systems he has developed with collaborators over the past three decades have achieved widespread use in Michigan, across the U.S., and worldwide. His work has significantly changed long-term care practice and regulation in the U.S. and around the world, leading to improved outcomes for older adults and other vulnerable groups.

#### Changing the mix

For healthcare providers to deliver the right care, at the right time, in the right place requires a comprehensive understanding of individual patients' needs. Health system managers and planners must also consider the appropriate allocation of resources required for effective patient care. All of these decisions can be supported through "case-mix" methodology, which provides a consistent way to classify individuals into groups based on their clinical characteristics and cost of care.

Nearly 30 years ago, as an early career faculty member at Yale University, Dr. Fries was part of the team developing a new methodology for classifying inpatient stays into groups for the purposes of Medicare reimbursement, now known as the Diagnosis-Related Group (DRG) classification system. The DRGs have since evolved to become the foundation for classifying hospital stays worldwide.

Dr. Fries was the team member assigned to develop a parallel system for nursing homes. He became the lead developer of the Resource Utilization Groups (RUG)

case-mix system, which has become the world's best-known classification system for nursing homes. The RUG system uses assessment information about nursing home patients to determine the relative cost of their care.

Under Dr. Fries' leadership and federal funding, the RUG system has been revised several times over the last three decades. It has been used since 1998 to pay U.S. nursing homes \$33 billion annually under Medicare's Prospective Payment System, and has been adopted by more than half of U.S. states to pay nursing homes under state-run Medicaid systems. The RUG system has also been validated in more than nine different countries with diverse healthcare systems, and several utilize it to structure payments for funding their long-term care systems.

#### Local, nationwide, and global impact of Dr. Fries' work:

- Developed the U.S. National Nursing Home Resident Assessment Instrument/Minimum Data Set (MDS), a landmark national implementation credited with changing nursing home practice and improving care.
- Lead developer of the system for measuring the burden of care among nursing home residents in the U.S., used nationwide to determine payment to nursing homes.
- Founder and President of interRAI, an international research collaborative of 100+ researchers across 35+ nations, whose goal is to improve the quality of life for vulnerable populations through a seamless and comprehensive clinical assessment system. His organization has developed more than 30 assessment systems covering virtually all healthcare sectors.
- Leads projects with individual U.S. states to improve access to care and understand their institutional and home-care populations.

**“The whole concept of measurement relies on everyone speaking a universal language. Having common measures lets providers across different settings improve continuity of care, and it also empowers families, advocates, and payers to monitor how individuals are doing across healthcare settings.”**  
— Brant Fries

### **A passion for measurement comes full circle**

Measurement of case mix begins with accurate description of the characteristics of the person receiving services. With a background in pure and theoretical mathematics, measurement, and operations research, Dr. Fries collaborated on the development of the U.S. National Nursing Home Resident Assessment Instrument (RAI)/Minimum Data Set (MDS), which became a federally mandated system as part of a comprehensive set of nursing home reforms passed by the U.S. Congress in the 1980s, as well as the basis for RUGs. The MDS is used to plan care for residents in virtually all U.S. long-term care facilities. The utility of the MDS has expanded over the years to inform Medicare and Medicaid reimbursement policies, and to support quality monitoring and improvement efforts. It is credited with changing nursing home practice and improving care in the U.S.

### **Broadening reach through global collaboration**

In the early 1990s, Dr. Fries established an international collaborative of researchers known as interRAI, whose goal is to improve the quality of life of vulnerable populations through the development and dissemination of comprehensive assessment systems that can be integrated across health and social services settings. The most important application of these assessments is clinical: to help identify an individual's most critical problems that could be addressed in a care plan, and then to provide internationally validated best practice guidelines for quality care.

interRAI has developed assessment systems that cover virtually every healthcare sector, including home care, assisted living, nursing homes, palliative care, well elderly, inpatient and community mental health, correctional facilities, acute care hospitals, post-acute rehabilitation, intellectual disability, children and youth mental health, and many more, most recently a caregiver assessment for home care clients.

Canada provides one example of the impact of interRAI's work, having widely adopted its assessments across its inpatient mental health, long-term home care, and nursing home settings, impacting millions of Canadians who receive care in these sectors each year. Clinicians can use the data collected with these assessments at the bedside to inform care planning and delivery, while researchers, policymakers, system planners, and healthcare facility managers can also use the data in their decision-making.

interRAI licenses its assessment systems free of charge to any caregiver or government in exchange for data to be used to continue to fuel interRAI research efforts. Nearly 200 million assessments based on interRAI instruments have been completed worldwide.

Dr. Fries continues to support assessment implementation by providing training on the use of assessments, facilitating seminars for senior government officials to understand the value of assessment data, and developing applications. In the US, Dr. Fries has led efforts to develop “level of care” determinations of who is eligible for long-term care supports and services in four states, and to design Michigan's Medicaid nursing home payment system, both based on interRAI assessments. Dr. Fries is also leading a team of gerontology researchers studying the health effects of lead exposure on elderly persons receiving home care services in the Flint area.

In October 2016, Dr. Fries received a Doctor of Laws degree in *honoris causa* from the University of Waterloo for his pioneering work in long-term care.

### **Keys to Impact: Dr. Fries' lessons learned and shared**

The real value of a scientific study is only achieved if attention is also paid to the implementation of these results, a task that can be as time-consuming as the original work, at least as important, and often much less recognized.

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Dr. Fries' team members include, at U-M: Mary L. James, M.A., Pil Park, Ph.D., Angela Schmorrow, M.S.W., and Melanie Thomasson, M.A.; within interRAI: John N. Morris, Ph.D. (US), John Hirdes, Ph.D. (Canada), Anja Declercq (Belgium), Harriet Finne-Soveri (Finland), Pálmi Jónsson (Iceland), and Len Gray (Australia).



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