

Health System Science: Essentials for the Clinician-Educator Online Course

Activity Description

This course focuses on the key concepts and skills related to health system science which is the study of systems, processes, and leadership to optimize healthcare delivery and person-centered care. Innovative application of these concepts is explored with the aim to identify practical and individualized ways to integrate them into clinical practice and education. The course will include plenary presentations combined with extensive interactive modules focused on the 6 domains of knowledge in health system science.

Target Audience

This course is designed for physicians, nurse practitioners, physician assistants, pharmacists, and nurses who have faculty and teaching responsibilities in allied health, undergraduate, graduate, or postdoctoral educational programs.

Learning Objectives

Upon conclusion of this activity, participants should be able to:

- Identify key concepts along with skills embedded in Health System Science curriculum.
- Recognize methods for integrating Science of Healthcare principles with skills into clinical care, as well as trainee education.
- Recognize the importance of health system science along with its clinical applicability.
- Identify team-based care actions that promote system science thinking.

Attendance at this Mayo Clinic course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

Accreditation Statement



In support of improving patient care, Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

Credit Statement(s)

AMA

Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 3.00 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ANCC

Mayo Clinic College of Medicine and Science designates this activity for a maximum of 3.00 ANCC contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

AAPA



Mayo Clinic College of Medicine and Science has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. Approval is valid until 03/17/2028. This activity is designated for 3.00 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

ACPE

Mayo Clinic College of Medicine and Science designates this educational activity for a maximum of 3.00 ACPE Knowledge-based contact hours. Participants should claim only the credit commensurate with the extent of their participation in the activity.

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Other Healthcare Professionals

A record of attendance will be provided to all registrants for requesting credits in accordance with state nursing boards, specialty societies or other professional associations.

Disclosure Summary

As a provider accredited by Joint Accreditation for Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity and scientific rigor in its educational activities. All who are in a position to control the content are required to disclose all financial relationships with any ineligible company. Faculty will also identify any off-label and/or investigational use of pharmaceuticals or instruments discussed in their content for FDA compliance.

Listed below are individuals with control of the content of this program who have disclosed...

Relevant financial relationship(s) with ineligible companies:

| Name | Nature of Relationship | Company |
|----------------------------|------------------------|---|
| Augustine S. Chavez, M.D. | Board of Directors | The Change Companies |
| Bart M. Demaerschalk, M.D. | Honoraria | Shionogi U.S.A., Inc.; Genentech, Inc. |
| Atul Jain, M.D., M.S. | Stock Equity | Astra Zeneca; Viatris, Inc.; Merck; Apple; Pfizer |
| C. Dan Johnson, M.D. | Intellectual Property | Siemens Aktiengesellschaft (AG) Toshiba Medical Systems Corporation |
| Bhavesh M. Patel, M.D. | Intellectual Property | Securisyn Medical, LLC; Skysong Innovations, LLC (fka Arizona Technology Enterprises LLC (AzTE) |
| | Stock Equity | GE; Philips; GE Healthcare; CVS Health Corp; GILD |
| Matthew A. Rank, M.D. | Intellectual Property | AstraZeneca UK - Zeneca Pharmaceuticals Limited |

All relevant financial relationships listed for these individuals have been mitigated.

No relevant financial relationship(s) with ineligible companies:

| Name | |
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| Amber N. Brooks-Gumbert, P.A.-C., M.S. Bryan J. Buechel, Pharm.D., R.Ph., M.B.A. Jenifer Hart, APRN, CNS, M.S.N. Katherine S. Peterson, Ph.D., M.S.N., R.N., C.N.E. Kim Hunsinger, Lead Quality Improvement Advisor Michael Campbell, Pharm.D | Neera Agrwal, M.D., Ph.D. Patti M. Thorn, Ph.D. Kristen Will, Ph.D., MHPE, PA-C Swapna Reddy, J.D., M.P.H. Corinne Irish |

References to off-label and/or investigational usage(s) of pharmaceuticals or instruments in their presentation:

None

For disclosure information regarding Mayo Clinic School of Continuous Professional Development accreditation review committee member(s) please visit: <https://ce.mayo.edu/content/disclosures>.

Disclaimer

Participation in this Mayo Clinic educational activity does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course. You should be aware that substantive developments in the medical field covered by this recording may have occurred since the date of original release.

Prerequisites for Participation

There are no prerequisites needed prior to participating in this education activity.

Method of Participation

Participation in this activity consists of reviewing the educational material, completing the learner assessment and evaluation.

How to Obtain Credit

To obtain credit, complete the assessment, evaluation and submit.

Release and Expiration Dates

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|------------------|-----------------|
| Release Date: | April 14, 2025 |
| Renewal Date: | (If applicable) |
| Expiration Date: | April 13, 2028 |

Acknowledgement of Commercial Support

No commercial support was received in the production of this activity.

Faculty and Course Director Listing and Credentials

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Bibliographic Resources

Gonzalo JD, Ogrinc G. Health system science: the “broccoli” of undergraduate medical education. *Acad Med*. 2019; 94(10):1425-1432.

Franklin P, Drane D, Wakschlag L, Ackerman R, Kho A, Cella D., 2022. Development of a learning health system science competency assessment to guide training and proficiency assessment. Wiley Periodicals LLC, 2022; doi:10.1002/lrh2.10343

Will, K.K. and Essary, A., 2021. Competency-based interprofessional continuing education focusing on systems thinking and health care delivery for health care professionals. *Journal of Continuing Education in the Health Professions*, 41(2), pp.153-156.

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