Stanford

Deborah Hsu, MD, MEd

Professor of Emergency Medicine (Pediatrics) and, by courtesy, of Pediatrics (Hospital Medicine)

CLINICAL OFFICE (PRIMARY)

- **Stanford Pediatric Emergency Medicine**

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Bio

CLINICAL FOCUS

- Pediatric Emergency Medicine

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Emergency Medicine
- Professor-Univ Med Line (By courtesy), Pediatrics
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Division Chief and Vice Chair, Pediatric Emergency Medicine, Stanford University School of Medicine, Dept. of Emergency Medicine, (2023- present)
- Division Chief, Pediatric Emergency Medicine, Baylor College of Medicine and Texas Children's Hospital, (2018-2023)
- Associate Program Director, Pediatric Residency, Baylor College of Medicine, (2015-2018)
- Clinical and Education Chief, Pediatric Emergency Medicine Division, Baylor College of Medicine, (2013-2017)
- Program Director, Pediatric Emergency Medicine Fellowship, Baylor College of Medicine and Texas Children's Hospital, (2008-2013)
- Associate Program Director, Pediatric Emergency Medicine Fellowship, Baylor College of Medicine and Texas Children's Hospital, (2002-2007)

HONORS AND AWARDS

- Davies Family Endowed Director of Pediatric Emergency Medicine, Stanford Medicine and Lucile Packard Children’s Hospital (2024)
- Steve Miller Award for Excellence in Education and Mentorship, American Academy of Pediatrics Section on Emergency Medicine (2022)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Credentials Committee, American Board of Pediatrics (2025 - present)
- Pediatrics Review Committee, Accreditation Council for Graduate Medical Education (2023 - present)
- Chair, Executive Committee, Section on Emergency Medicine, American Academy of Pediatrics (2022 - 2024)
- Emergency Medicine Subboard member and Credentialing Committee Chair, American Board of Pediatrics (2019 - 2024)
- Steering Committee, Association of Pediatric Program Directors Subspecialty Pediatric Investigator Network (2014 - present)

PROFESSIONAL EDUCATION

- Board Certification: Pediatrics, American Board of Pediatrics (2023)
- Board Certification: Pediatric Emergency Medicine, American Board of Pediatrics (2002)
- Master of Education, University of Houston College of Education , Curriculum and Instruction with an Emphasis in Teaching the Health Sciences (2007)
- Board Certification, American Board of Pediatrics , Pediatrics (1999)
- Fellowship: Baylor College of Medicine Pediatric Emergency Medicine Program (2000) TX
- Residency: Baylor College of Medicine Pediatric Residency (1997) TX
- Medical Degree, University of North Carolina, School of Medicine - Chapel Hill, NC , Medicine (1994)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Competency-based medical education; assessment; curriculum development; professional development

Projects:

American Board of Pediatrics EPAs Common to All Subspecialties and Subspecialty Specific EPAs. July 2026. Access at https://www.abp.org/sites/public/files/pdf/epas-subspecialties-full-list.pdf. Pediatric Emergency Medicine Entrustable Professional Activities Revisions - Work Group leader. 2025-2026.

American Board of Pediatrics EPA to Milestone Navigator Pediatric Emergency Medicine Work Group leader. Mapping pediatric emergency medicine milestones 2.0 to pediatric emergency medicine and common pediatric subspecialty entrustable professional activities. March 2024. Access at https://public.tableau.com/app/profile/americanboardofpediatrics/viz/EPAtoMilestoneCrosswalk/PrimaryDashboard?publish=yes

Pediatric Emergency Medicine Milestones Work Group member. Pediatric Emergency Medicine Milestones. The Accreditation Council for Graduate Medical Education. April 2022. Access at https://www.acgme.org/globalassets/pdfs/milestones/pediatricemergencymedicinemilestones.pdf

Pediatric Emergency Medicine Milestones Work Group member. Supplemental Guide: Pediatric Emergency Medicine. The Accreditation Council for Graduate Medical Education. April 2022. Access at https://www.acgme.org/globalassets/pdfs/milestones/pediatricemergencymedicinesupplementalguide.pdf

Milestones 2.0 - Pediatric Emergency Medicine Webcast. ACGME Digital Learning. May 2022. Access at https://www.acgme.org/specialties/pediatrics/milestones/ https://vimeo.com/705402260/17a977fe28

Publications

PUBLICATIONS

- **Exploring Gender, Race, and Ethnicity Differences in Assessment of Pediatric Subspecialty Fellows Using the Entrustable Professional Activity Framework** *ACADEMIC PEDIATRICS*
  Langhan, M. L., Schwartz, A., Czaja, A. S., Hsu, D., Turner, D. A., Karnik, R., Moffatt, M. E., Mink, R.
  2026; 26 (3)
- **Clinical use of topical anesthetics in children** *UpToDate*
  Hsu, D.

Wolters Kluwer.2026

- **Subcutaneous infiltration of local anesthetics** *UpToDate*
  Hsu, D.
  Wolters Kluwer.2026

- **Exploring Gender, Race, and Ethnicity Differences in Assessment of Pediatric Subspecialty Fellows Using the Entrustable Professional Activity Framework.** *Academic pediatrics*
  Langhan, M. L., Schwartz, A., Czaja, A. S., Hsu, D., Turner, D. A., Karnik, R., Moffatt, M. E., Mink, R.
  2025: 103215

- **Entrustable Professional Activities to Milestones Advisor for Pediatric Subspecialties: Developing a Comprehensive Approach to Competency-Based Assessment** *ACADEMIC PEDIATRICS*
  Page, L. C., Boyer, D., Lee-Kim, Y., Moffatt, M. E., Lujano, B., Weidemann, D., Schwartz, A., Turner, D. A., Hsu, D.
  2025; 25 (8): 103122

- **From Assistance to Autonomy: Evaluating Procedural Competency in Pediatric Emergency Medicine.** *AEM education and training*
  Barber, R., Rus, M., Moran, E., Sampayo, E. M., Hsu, D., Chumpitazi, C. E., Camp, E. A., Singh, N. V.
  2025; 9 (5): e70095

- **Show Me the Money: A Movement Towards Transparency in Pediatric Emergency Medicine Compensation.** *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*
  Jackson, J., Chumpitazi, C. E., Hsu, D., Baluyot, M., Barrick, L., Feng, S. Y., Hariharan, S., Platt, S., Simon, H. K., Stanley, R., Langhan, M. L., Reed, J. L.
  2025

- **EPA to Milestones Advisor for Pediatric Subspecialties: Developing a Comprehensive Approach to Competency-Based Assessment.** *Academic pediatrics*
  Page, L. C., Boyer, D., Lee-Kim, Y., Moffatt, M. E., Lujano, B. N., Weidemann, D., Schwartz, A., Turner, D. A., Hsu, D.
  2025: 103122

- **Procedural Skills and Emergency Medicine Common Program Requirements: It's Time to Address Skill Decay.** *AEM education and training*
  Pokrajac, N., Schertzer, K., Hsu, D., Sebok-Syer, S. S.
  2025; 9 (4): e70081

- **Second Scope, New Findings: Pediatric Stridor Is Not Always Due to Croup or Laryngomalacia: A Case Report.** *Clinical practice and cases in emergency medicine*
  Ghaith, S., Hsu, D., Dixon, W.
  2025; 9 (3): 297-301

- **Validity Evidence for Level of Supervision Scales with Pediatric Subspecialty-Specific Entrustable Professional Activities.** *Academic pediatrics*
  Czaja, A. S., Schwartz, A., James, S. H., Sauer, C., Mehta, J. J., Kesselheim, J., Weiss, P., Turner, D. A., Stafford, D. E., Robinson, B., Rama, J., Pitts, S., Moffatt, et al
  2025: 103116

- **Pediatric Fellows and Their Ability to Meet Minimum Supervision Levels at Graduation.** *Pediatrics*
  Weiss, P. G., Schwartz, A., Boyer, D. L., Chess, P. R., Fussell, J. J., McGann, K. A., Moffatt, M. E., Herman, B. E., Turner, D. A., Pitts, S. A., Langhan, M. L., High, P., James, et al
  2025

- **Pediatric Emergency Medicine Fellows' Procedural Experiences During Training.** *Pediatric emergency care*
  Moran, E. D., Hsu, D., Wisbon, M., Camp, E. A., Duncan, E., Elkarim, A., Ellington, A. B., Graff, D., Mangold, K. A., McVety, K., Nagler, J., Patel, L., Sagalowsky, et al
  2025

- **Many Pediatric Subspecialty Fellows Are Not Ready to Graduate From Fellowship in 2 Years.** *Pediatrics*
  Pitts, S., Schwartz, A., Langhan, M. L., High, P., James, S. H., Karnik, R., Aye, T., Boyer, D. L., Stafford, D. E., Rama, J. A., Robinson, B. W., Hsu, D., Moffatt, et al
  2025

- **Second Scope, New Findings: Pediatric Stridor Is Not Always Due to Croup or Laryngomalacia: A Case Report** *Clin Pract Cases Emerg Med*
  Ghaith, S., Hsu, D., Dixon, W.
  2025; 9 (3): 297-301
- **Optimizing Advanced Imaging of the Pediatric Patient in the Emergency Department: Technical Report.** *Pediatrics*
  Marin, J. R., Lyons, T. W., Claudius, I., Fallat, M. E., Aquino, M., Ruttan, T., Daugherty, R. J.
  2024; 154 (1)
- **Optimizing Advanced Imaging of the Pediatric Patient in the Emergency Department: Policy Statement.** *Pediatrics*
  Marin, J. R., Lyons, T. W., Claudius, I., Fallat, M. E., Aquino, M., Ruttan, T., Daugherty, R. J.
  2024; 154 (1)
- **Competency based medical education and trust in the learning environment.** *Current problems in pediatric and adolescent health care*
  Hsu, D., Rassbach, C., Leaming-Van Zandt, K., Morrow, A., Rubenstein, J., Tatem, A., Turner, D. A., Poitevien, P., Barone, M. A.
  2024: 101640
- **Implementing Entrustable Professional Activities in Pediatric Fellowships: Facilitating the Process.** *Pediatrics*
  Langhan, M. L., Boyer, D. L., Hsu, D., Moffatt, M. E., Pitts, S. A., Atlas, M. P., Aye, T., Chess, P., Curran, M. L., Czaja, A. S., Dammann, C. E., Fussell, J., George, et al
  2024
- **Level of Supervision for the Entrustable Professional Activities Common to General Pediatrics and the Subspecialties Decreases from Residency to Fellowship.** *Academic pediatrics*
  Mink, R. B., Schwartz, A., Mahan, J. D., Fussell, J. J., George, R., Schumacher, D. J., McFadden, V., Turner, D. A., Atlas, M. P.
  2024
- **Relationship between epa level of supervision with their associated subcompetency milestone levels in pediatric fellow assessment.** *BMC medical education*
  Mink, R. B., Carraccio, C. L., Herman, B. E., Weiss, P., Turner, D. A., Stafford, D. E., McGann, K. A., Kesselheim, J., Hsu, D. C., High, P. C., Fussell, J. J., Curran, M. L., Chess, et al
  2023; 23 (1): 720
- **Pediatric Emergency Medicine Fellowship Program Directors' Viewpoint: Minimum Levels of Entrustment for Graduating Fellows and Practicing Physicians to Perform the Subspecialty's Professional Activities.** *Pediatric emergency care*
  Hsu, D. C., Baghdassarian, A., Caglar, D., Rose, J. A., Herman, B. E., Schwartz, A., Mink, R., Langhan, M. L.
  2023; 39 (8): 574-579
- **Spanish-Speaking Caregivers' Perception of Emergency Physicians' Interpersonal and Communication Skills in a Pediatric Emergency Department.** *Pediatric emergency care*
  Russell, E. A., Hsu, D., Camp, E. A., Soto-Ruiz, K., Leaming-Van Zandt, K.
  2023; 39 (4): 253-258
- **CONFERD-HP: recommendations for reporting COmpeteNcy FramEwoRk Development in health professions.** *The British journal of surgery*
  Batt, A. M., Tavares, W., Horsley, T., Rich, J. V., Williams, B.
  2023; 110 (2): 233-241
- **Career Development in Pediatric Emergency Medicine: What Do We Need?** *Pediatric emergency care*
  Chumpitazi, C. E., Allister, L., Cho, C., Hoffmann, J. A., Hsu, D., Iyer, M., Mangold, K., Marino, M., Randell, K. A., Ponce, H., Hariharan, S.
  2022; 38 (9): e1552-e1556
- **Fellow Entrustment for the Common Pediatric Subspecialty Entrustable Professional Activities Across Subspecialties.** *Academic pediatrics*
  Pitts, S., Schwartz, A., Carraccio, C. L., Herman, B. E., Mahan, J. D., Sauer, C. G., Dammann, C. E., Aye, T., Myers, A. L., Weiss, P. G., Turner, D. A., Hsu, D. C., Stafford, et al
  1800
- **Impact of a Pediatric-Focused Communication Course on Patient/Caregiver-Perceived Physician Communication Skills in a Pediatric Emergency Department.** *Pediatric emergency care*
  Leaming-Van Zandt, K. J., Zhu, H., Banuelos, R. C., Lopez, M. A., Hsu, D. C.
  2021; 37 (12): e1173-e1180
- **Achieving Entrustable Professional Activities During Fellowship** *PEDIATRICS*

Weiss, P. G., Schwartz, A., Carraccio, C. L., Herman, B. E., Turner, D. A., Aye, T., Fussell, J. J., Kesselheim, J., Mahan, J. D., McGann, K. A., Myers, A., Stafford, D. E. J., Chess, et al
2021; 148 (5)

- **Achieving Entrustable Professional Activities During Fellowship.** *Pediatrics*
  Weiss, P. G., Schwartz, A., Carraccio, C. L., Herman, B. E., Turner, D. A., Aye, T., Fussell, J. J., Kesselheim, J., Mahan, J. D., McGann, K. A., Myers, A., Stafford, D. E., Chess, et al
  2021
- **Design of a point-of-care ultrasound curriculum for pediatric emergency medicine fellows: A Delphi study.** *AEM education and training*
  Gold, D., Levine, M., Hsu, D., Way, D. P., Shefrin, A. E., Lam, S. H., Lewiss, R., Marin, J. R.
  2021; 5 (4): e10700
- **Development of a novel pediatric point-of-care ultrasound question bank using a modified Delphi process.** *AEM education and training*
  Alade, K. H., Marin, J. R., Constantine, E., Ekpenyong, A., Farrell, S. E., Horowitz, R., Hsu, D., Kwan, C. W., Ng, L., Leonard, P. J., Lewiss, R. E.
  2021; 5 (4): e10651
- **Continued Supervision for the Common Pediatric Subspecialty Entrustable Professional Activities May Be Needed Following Fellowship Graduation.** *Academic medicine : journal of the Association of American Medical Colleges*
  Turner, D. A., Schwartz, A., Carraccio, C., Herman, B., Weiss, P., Baffa, J. M., Chess, P., Curran, M., Dammann, C., High, P., Hsu, D., Pitts, S., Sauer, et al
  2021; 96 (7S): S22-S28
- **Maintenance of Certification Pediatrics: Pediatric Emergency Medicine (PEM): The New Part 3 Maintenance of Certification Assessment Option.** *Pediatric emergency care*
  Iyer, M. S., Bachur, R., Wang, V., Hsu, D., Mistry, R. D., Nagler, J., Mick, N., Althouse, L., Du, Y., Leslie, L. K.
  2021; 37 (6): 329-333
- **Development and Validation of the Pediatric Physician Interpersonal Communication Skills Assessment of Emergency Physicians by Pediatric Patients and Their Caregivers**
  Hsu, D. C., Kumar, S., Russell, E. A., Soto-Ruiz, K., Leaming-Van Zandt, K. J.
  WILEY.2021
- **Emergency Medicine Providers' Knowledge and Management of Pediatric Tropical Diseases: A Needs Assessment.** *Pediatric emergency care*
  Thomas, V. A., Crouse, H. L., Murray, K. O., Hsu, D. C., Camp, E. A., Cruz, A. T.
  2020; 36 (11): e622-e625
- **Focused Research Infrastructure for Postgraduate Pediatric Emergency Medicine Fellows Increases Dissemination of Scholarly Work.** *AEM education and training*
  Cruz, A. T., Doughty, C. B., Hsu, D. C., Chumpitazi, C. E., Sampayo, E. M., Meskill, S. D., Shah, M. I.
  2020; 4 (3): 231-238
- **Diarrhea** *Fleisher and Ludwig Textbook of Pediatric Emergency Medicine*
  Pereira, F., Hsu, D.
  Wolters Kluwer.2020; 8th
- **Agreement of Program Directors With Clinical Competency Committees for Fellow Entrustment.** *Journal of medical education and curricular development*
  Mink, R., Herman, B. E., Carraccio, C., Aye, T., Baffa, J. M., Chess, P. R., Fussell, J. J., Sauer, C. G., Stafford, D. E., Weiss, P., Curran, M. L., Dammann, C. E., High, et al
  2020; 7: 2382120520936613
- **Improved Team Performance During Pediatric Resuscitations After Rapid Cycle Deliberate Practice Compared With Traditional Debriefing: A Pilot Study.** *Pediatric emergency care*
  Lemke, D. S., Fielder, E. K., Hsu, D. C., Doughty, C. B.
  2019; 35 (7): 480-486
- **Creating the Subspecialty Pediatrics Investigator Network (vol 192, pg 3, 2018)** *JOURNAL OF PEDIATRICS*
  Mink, R., Schwartz, A., Carraccio, C., High, P., Dammann, C., McGann, K. A., Kesselheim, J., Aye, T., Baffa, J., Chess, P., Curran, M., Fussell, J., Hsu, et al

2019; 207: 269

- **Validity of Level of Supervision Scales for Assessing Pediatric Fellows on the Common Pediatric Subspecialty Entrustable Professional Activities.** *Academic medicine : journal of the Association of American Medical Colleges*
  Mink, R. B., Schwartz, A., Herman, B. E., Turner, D. A., Curran, M. L., Myers, A., Hsu, D. C., Kesselheim, J. C., Carraccio, C. L.
  2018; 93 (2): 283-291
- **Pediatric Emergency Medicine Online Curriculum Improves Resident Knowledge Scores, But Will They Use It?** *Pediatric emergency care*
  Little-Wienert, K., Hsu, D., Torrey, S., Lemke, D., Patel, B., Turner, T., Doughty, C.
  2017; 33 (11): 713-717
- **EPAs that are common to all subspecialties: Lead within the subspecialty profession - ABP Information for Program Directors**
  Deborah, H., Aye, T., Carraccio, C., Goodman, D., Johnson, T., Ryan, S.
  American Board of Pediatrics. Chapel Hill NC.
  2017
- **Essentials of Pediatric Emergency Medicine Fellowship Part 7: Careers in PEM.** *Pediatric emergency care*
  Allen, C. H., Anders, J., Ishimine, P., Roskind, C., Shook, J.
  2016; 32 (11): 807-811
- **Essentials of Pediatric Emergency Medicine Fellowship: Part 6: Program Administration.** *Pediatric emergency care*
  Kim, I. K., Zuckerbraun, N., Kou, M., Vu, T., Levasseur, K., Yen, K., Chapman, J., Doughty, C., McAneney, C., Zaveri, P., Hsu, D.
  2016; 32 (10): 726-730
- **Essentials of PEM Fellowship: Part 5: Scholarship Prepares Fellows to Lead as Pediatric Emergency Specialists.** *Pediatric emergency care*
  Reynolds, S., Chang, T., Iyer, S., Mann, C., Wilkinson, M., Yen, K., Schnadower, D.
  2016; 32 (9): 645-7
- **Essentials of Pediatric Emergency Medicine Fellowship: Part 4: Beyond Clinical Education.** *Pediatric emergency care*
  Wolff, M., Carney, M., Eldridge, C., Zaveri, P., Kou, M.
  2016; 32 (8): 551-4
- **Essentials of Pediatric Emergency Medicine Fellowship: Part 3: Clinical Education and Experience.** *Pediatric emergency care*
  Mittiga, M. R., Nagler, J., Eldridge, C. D., Ishimine, P., Zuckerbraun, N. S., McAneney, C. M.
  2016; 32 (7): 479-85
- **Essentials of PEM Fellowship Part 2: The Profession in Entrustable Professional Activities** *PEDIATRIC EMERGENCY CARE*
  Hsu, D., Nypaver, M., Fein, D. M., McAneney, C., Santen, S., Nagler, J., Zuckerbraun, N., Roskind, C. G., Reynolds, S., Zaveri, P., Stankovic, C., House, J. B., Langhan, et al
  2016; 32 (6): 410-418
- **Essentials of Pediatric Emergency Medicine Fellowship: Part 1: An Overview.** *Pediatric emergency care*
  Zaveri, P. P., Hsu, D., Mittiga, M. R., Wolff, M., Reynolds, S., Kim, I., Allen, C., McAneney, C. M., Kou, M.
  2016; 32 (5): 337-9
- **Creation and Assessment of a Bad News Delivery Simulation Curriculum for Pediatric Emergency Medicine Fellows.** *Cureus*
  Chumpitazi, C. E., Rees, C. A., Chumpitazi, B. P., Hsu, D. C., Doughty, C. B., Lorin, M. I.
  2016; 8 (5): e595
- **A Novel Approach to Combining Pediatric Emergency Medicine and Global Health Fellowships.** *Pediatric emergency care*
  Crouse, H. L., Mullan, P. C., Macias, C. G., Hsu, D. C., Shook, J. E., Sirbaugh, P. E., Schutze, G. E., Torrey, S. B.
  2016; 32 (3): 157-62
- **Continuing Medical Education for Air Medical Providers: The Successes and Challenges.** *Pediatric emergency care*
  Miller, J. O., Thammasitboon, S., Hsu, D. C., Shah, M. I., Minard, C. G., Graf, J. M.
  2016; 32 (2): 87-92
- **Subspecialty-Specific EPAs: Pediatric Emergency Medicine Entrustable Professional Activities**
  Hsu, D., Nypaver, M., Kou, M.
  American Board of Pediatrics.

2016

- **Development and assessment of a pediatric emergency medicine simulation and skills rotation: meeting the demands of a large pediatric clerkship.** *Medical education online*
  Fielder, E. K., Lemke, D. S., Doughty, C. B., Hsu, D. C., Middleman, A. B.
  2015; 20: 29618

- **Investing in future pediatric subspecialists: a fellowship curriculum that prepares for the transition to academic careers.** *Medical education online*
  Rama, J. A., Campbell, J. R., Balmer, D. F., Turner, T. L., Hsu, D. C.
  2015; 20: 26714

- **A novel briefing checklist at shift handoff in an emergency department improves situational awareness and safety event identification.** *Pediatric emergency care*
  Mullan, P. C., Macias, C. G., Hsu, D., Alam, S., Patel, B.
  2015; 31 (4): 231-8

- **Pediatric Emergency Medicine Fellowship Programs** *PEDIATRIC EMERGENCY CARE*
  Hsu, D.
  2013; 29 (4): 541-547

- **Pediatric emergency medicine fellow training in ultrasound: consensus educational guidelines.** *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*
  Vieira, R. L., Hsu, D., Nagler, J., Chen, L., Gallagher, R., Levy, J. A.
  2013; 20 (3): 300-6

- **Pediatric emergency medicine fellowship programs.** *Pediatric emergency care*
  Hsu, D.
  2012; 28 (4): 395-401

- **Mobile pediatric emergency response team: patient satisfaction during the novel H1N1 influenza outbreak.** *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*
  Laos, C. M., DiStefano, M. C., Cruz, A. T., Caviness, A. C., Hsu, D. C., Patel, B.
  2012; 19 (3): 274-9

- **Pediatric Emergency Medicine Fellowship Programs** *PEDIATRIC EMERGENCY CARE*
  Hsu, D.
  2011; 27 (5): 455-467

- **Efficacy of a near-infrared light device in pediatric intravenous cannulation: a randomized controlled trial.** *Pediatric emergency care*
  Perry, A. M., Caviness, A. C., Hsu, D. C.
  2011; 27 (1): 5-10

- **Rubric evaluation of pediatric emergency medicine fellows.** *Journal of graduate medical education*
  Hsu, D. C., Macias, C. G.
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