

Building Rural Workforce Capacity for Dementia Risk Reduction: Developing Digital Training Modules to Advance Brain Health Equity

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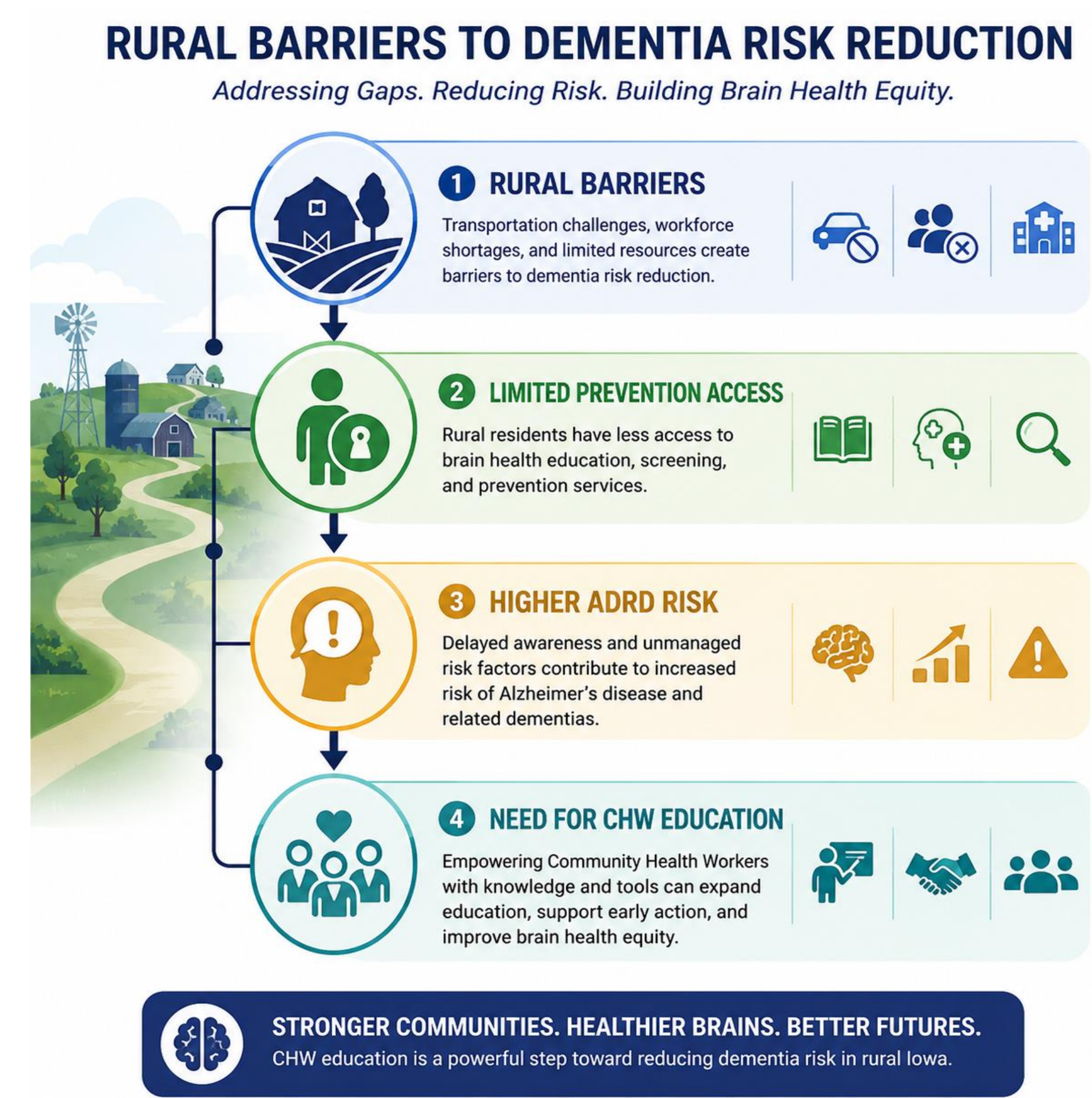
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Background

- Rural communities experience a disproportionate AD/ADRD burden:
 - Delayed diagnosis
 - Faster functional decline
 - Limited access to prevention & supportive resources
- Nearly 45% of dementia risk are modifiable lifestyle & behavioral factors
- Iowa has >66,000 adults living with AD.
- Community Health Workers (CHWs) may help expand access to brain health education.

Figure 1. Rural Barriers to Dementia Risk Reduction.



Methods

Community Partnerships

- Built on prior community-engaged dementia risk reduction (DRR) initiatives in underserved rural Iowa.
- Collaborated with a mobile health clinic and local public health agencies.

Content Development

- Developed evidence-based DRR educational materials targeting modifiable dementia risk factors.
- Adapted materials for Community Health Worker (CHW) training using ChatGPT 5.5 Instant large language model.

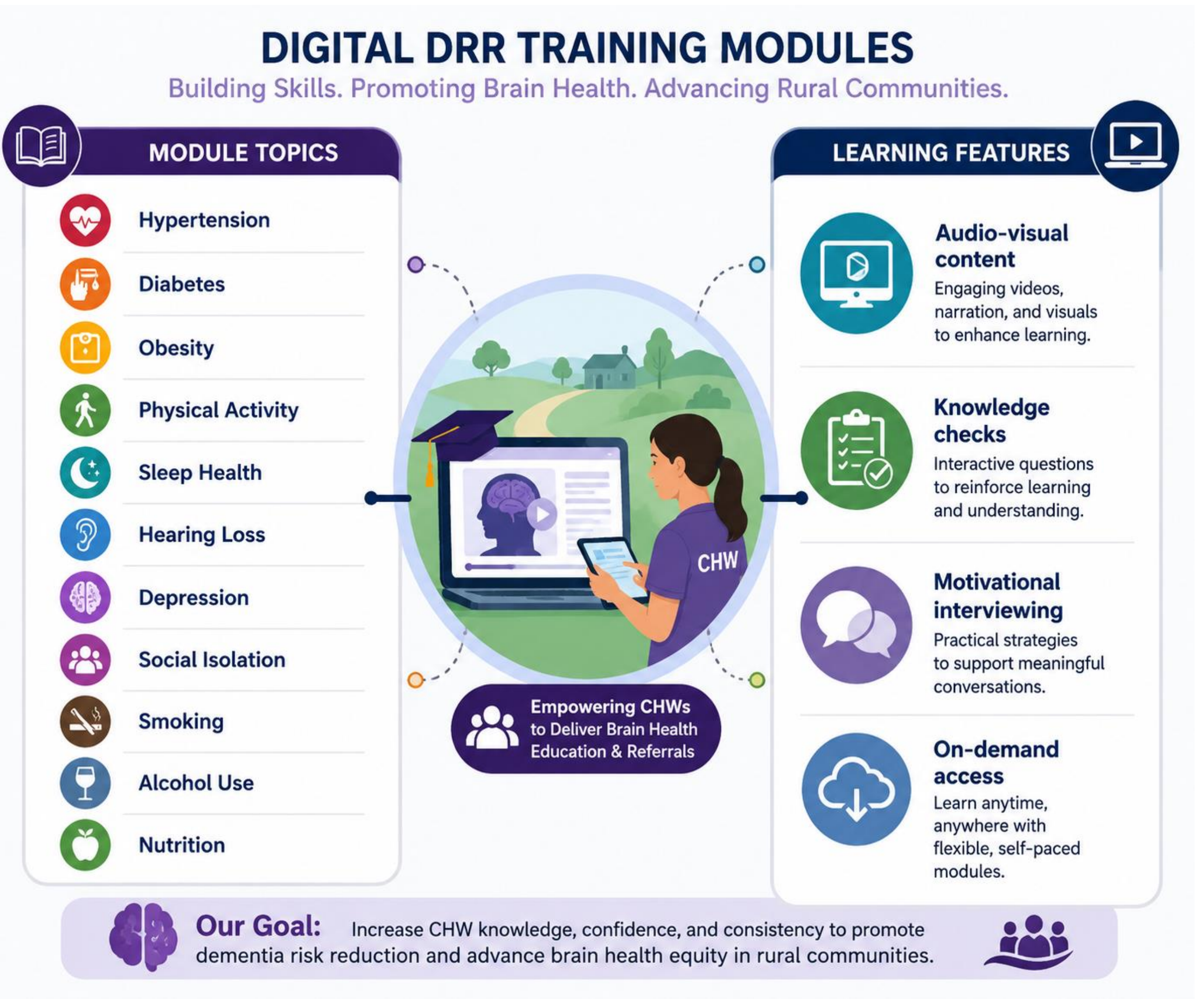
Digital Module Design

- Translated educational materials into web-based, on-demand training modules.
- Designed to support CHW knowledge, confidence, and delivery of DRR education and referrals.
- Module Content and Learning

Results - Project Development

- Developed digital, on-demand DRR training modules for CHWs.
- Combined evidence-based brain health content with interactive learning strategies.
- Established a scalable platform for rural workforce education.

Figure 2. Overview of digital DRR training modules and instructional features.



Example Module Activity

Daily Strategies to Keep Blood Pressure in Check

Encourage people to:

- reduce sodium (salt) consumption
- maintain a healthy lifestyle

Reduce Sodium (Salt)

- limit sodium to less than 2,300mg per day
- check food labels
- reduce ultra-processed foods (instant noodles, canned soups, flavored chips, burgers, deli meats, etc...)

Keep a Healthy Lifestyle

- focus on potassium-rich and healthy foods (bananas, spinach, beans, tofu, eggs, turkey, fish)
- stay active (150 minutes/week)
- limit alcohol
- quit smoking

Discussion

- Addresses gaps in dementia risk reduction education in rural communities.
- Strengthens CHW capacity to deliver brain health education and referrals.
- Provides a scalable approach to expanding evidence-based DRR strategies.
- Future work will evaluate implementation and training outcomes.

Implications

- Expands access to dementia risk reduction education in rural communities.
- Strengthens CHW capacity to promote brain health and prevention.
- Provides a scalable model for workforce development and community outreach.

Next Steps

- Pilot implementation with rural partners.
- Evaluate feasibility, acceptability, and CHW learning outcomes.
- Refine modules for broader dissemination.

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References



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