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Short Communication

Mapping the Choosing Wisely campaigns in physical therapy: Are we missing an opportunity to reduce low-value care?

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ABSTRACT

Background: The Choosing Wisely campaign (CWC) aims to reduce low-value care by encouraging healthcare professionals and patients to discuss unnecessary tests and treatments. While this campaign has been adopted in various medical fields, its implementation in physical therapy is still emerging.

Objectives: To (i) identify physical therapy associations participating in the CWC and (ii) characterize the content of their recommendations.

Methods: We identified physical therapy associations affiliated with World Physiotherapy and conducted a search on their websites or contacted them via email to identify existing Choosing Wisely recommendations. The identified recommendations were categorized into musculoskeletal, neurology, cardiorespiratory, women's health, and mixed themes.

Results: Out of 127 physical therapy associations, seven (5.5 %) had Choosing Wisely recommendations, representing associations from Brazil, the USA, Norway, Italy, Australia, Spain, and Switzerland. We identified 62 recommendations, with the majority (48.4 %) related to musculoskeletal physical therapy, followed by mixed themes (27.4 %), women's health (14.5 %), cardiorespiratory (6.4 %), and neurology (3.2 %).

Conclusion: The adoption of the Choosing Wisely campaign among physical therapy associations appears to be limited. Most recommendations focus on musculoskeletal physical therapy, indicating an opportunity for broader engagement with the campaign. Efforts to promote awareness and adoption of this campaign is needed to support evidence-based practices and reduce low-value care in physical therapy.

Introduction

Healthcare spending continues to rise, with a significant portion directed toward wasteful practices, particularly low-value care. Low-value care includes diagnostic tests, procedures, and treatments that offer no benefit to patients and, in some cases, may even cause harm. To reduce low-value care practices, several initiatives have been developed

such as the "Choosing Wisely" and "Less is More" campaigns.

The Choosing Wisely Campaign (CWC) (http://www.choosingwisely.org) was launched by the American Board of Internal Medicine (ABIM) Foundation in 2012 to challenge the "more-is-better" mindset in healthcare practices. It aims to reduce low-value care by encouraging conversations between healthcare professionals and patients about commonly used tests and treatments that may not be necessary.²

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Fig. 1. A world map representing the current World Physiotherapy member associations. Countries with an association were shaded in blue, while those without remained uncolored. Red dots represent the countries with a Choosing Wisely initiative in the physical therapy field (data were collected between October and November 2023).

Although rising healthcare costs are a global issue, the CWC emphasizes the value of care and potential risks to patients, rather than focusing on cost as the primary motivating factor.³

The CWC has gained worldwide attention and has been adopted by over 80 healthcare specialty societies in more than 30 countries. In physical therapy, several authors have published CWC recommendation lists endorsed by associations such as the American Physical Therapy Association, the Australian Physiotherapy Association, the Brazilian Orthopedic Physical Therapy Association, and the Brazilian Association of Physical Therapy in Women's Health. However, CWCs have been published only on associations websites. Considering the potential of the CWC to reduce low-value care in physical therapy, this study aimed to: (i) identify physical therapy associations participating in the CWC and (ii) characterize the content of their recommendations.

Methods

Study design and ethical aspects

We conducted a review of physical therapy associations' websites to identify materials related to the CWC. Initially, we identified associations from different countries that are members of World Physiotherapy (https://world.physio/) along with their respective websites. This study is characterized as a review and involved publicly available information on websites; therefore, it did not require approval by an Ethics Committee, as no human participants were directly involved.

Data sources and search strategies

A simple search was conducted on each association's website using the term "choosing wisely". When we could not find Choosing Wisely recommendations on an association's website, we sent emails to each association's contact address on three separate occasions, with 15-day intervals, inquiring about the existence of Choosing Wisely recommendations. Follow-up emails were sent only to associations that had not responded regarding the availability of recommendations. The data were collected between October and November 2023.

Data selection

We included all patient materials that were part of the CWC. There were no language restrictions. In cases where materials were not in English, we requested the association to provide an English translation of the recommendations. We excluded materials that were not related to the CWC, as well as guidelines and recommendations specifically intended for clinicians.

Data extraction

The data identified on the World Physiotherapy website were organized in an Excel spreadsheet. Descriptive analysis was conducted using RStudio (2022.12.0+353), focusing on the number of associations, their respective countries, and response rates. To visualize the distribution of World Physiotherapy member associations, a choropleth map was created in Python using the pandas, geopandas, and matplotlib packages. Choosing Wisely materials were downloaded, and recommendations were extracted. These recommendations were then categorized by two authors (F.J.J.R and L.C.Y) into five groups: musculoskeletal, neurology, cardiorespiratory, women's health, and mixed.

Results

At the time of our analysis, we identified 127 physical therapy associations that were members of World Physiotherapy. Out of 127 physical therapy associations, seven (5.5 %) confirmed having Choosing Wisely recommendations. These associations were from Brazil, the USA, Norway, Italy, Australia, Spain, and Switzerland (Fig. 1).

A total of 62 recommendations were identified, with the following distribution: 30 (48.4%) related to musculoskeletal physical therapy, 17 (27.4%) covering mixed themes, 9 (14.5%) focused on women's health, 4 (6.4%) on cardiorespiratory physical therapy, and 2 (3.2%) on neurological physical therapy. Choosing Wisely recommendations related to musculoskeletal physical therapy were related to low back (10; 33.4%), neck (7; 23.4%), shoulder (6; 20%), knee (5; 16.7%), and ankle and foot (2; 6.7%). Brazil presented the highest number of recommendations (20; 32.2%), followed by Norway (15; 24.1%), Australia

 Table 1

 Choosing wisely recommendations according to countries.

ountry	Choosing wisely recommendation	Physical therapy field
	Do not provide ongoing manual therapy for patients with adhesive capsulitis of the shoulder	musculoskeletal (Shoulder)
Australia (n=6)	Do not request imaging for patients with non-specific low back pain and no indicators of a serious cause for low back pain	musculoskeletal (Back)
(11-0)	Avoid using electrotherapy modalities in the management of patients with low back pain	musculoskeletal (Back)
	Do not request imaging of the cervical spine in trauma patients, unless indicated by a validated decision rule	musculoskeletal (Neck)
	Do not request imaging for acute ankle trauma unless indicated by the Ottawa	musculoskeletal (Ankle)
	Ankle Rules (localized bone tenderness or inability to weight-bear as defined in the Rules)	
	Do not routinely use incentive spirometry after upper abdominal and cardiac surgery	cardiorespiratory
	Do not use physical therapy interventions that make pain worse in the early phase of frozen shoulder	musculoskeletal (Shoulder)
Brazil (n=20)	Do not use cupping therapy to control shoulder pain related to the rotator cuff in subacromial space	musculoskeletal (Shoulder)
	In the absence of suspected serious illnesses (e.g. Cancer) or significant trauma (e.g. Fractures), the use of imaging tests is not	musculoskeletal (Shoulder)
	recommended as the main reference to guide the physical therapy diagnosis of shoulder pain related to the rotator cuff in	
	the subacromial space Do not recommend the complete rest	musculoskeletal
	/restriction of daily shoulder movements to patients with shoulder pain related to the rotator cuff	(Shoulder)
	Do not use passive therapies alone to treat patients with shoulder pain related to the rotator cuff and subacromial space	musculoskeletal (Shoulder)
	Do not use passive interventions alone in patients with low back pain	musculoskeletal (Back)
	Do not use lumbar back braces for prevention, as well as for the treatment of chronic low back pain	musculoskeletal (Back)
	Do not recommend imaging tests for low back pain unless serious illnesses are suspected, such as trauma, cancer, infection,	musculoskeletal (Back)
	cauda equina syndrome Do not use imaging tests to guide your physical therapy approaches in patients with chronic low back pain	musculoskeletal (Back)
	Do not recommend the use of insoles to prevent or to treat patients with low back pain	musculoskeletal (Back)
	The use of cervical collars is not recommended for persistent neck pain, except in cases of trauma or neurological	musculoskeletal (Neck)
	symptoms The use of high-velocity, low amplitude cervical manipulation techniques in people with suspected cervical neurovascular	musculoskeletal (Neck)
	disorders is not recommended Do not recommend the use of passive physical therapy modalities as the sole	musculoskeletal (Neck)
	treatment for acute or chronic neck pain Imaging tests for neck pain are not recommended unless serious illness is	musculoskeletal (Neck)
	suspected, such as traumatic injuries, cancer, infection, myelopathy, and severe radicular pain that does not improve with	
	clinical treatment The use of manual therapy techniques alone is not recommended for chronic neck pain	musculoskeletal (Neck)

Table 1 (continued)

	Choosing wisely recommendation	Physical therapy field
	Do not perform pelvic floor muscle	women's health
	assessment by manometry in women who	
	are unable to contract these muscles	
	Do not perform indirect contraction exercises of the pelvic floor muscles and/or	women's health
	other muscle groups to treat pelvic floor	
	disorders	
	Do not carry out programs such as the Paula	women's health
	Methods, hypopressive gymnastics, pilates,	
	and yoga to treat pelvic floor disorders	
	Do not perform pelvic floor muscle training	women's health
	without individual supervision to treat pelvic floor disorders such as urinary	
	incontinence, fecal incontinence, or pelvic	
	organ prolapses	
	Do not perform pelvic floor muscle training	women's health
	to treat pelvic floor disorders (urinary	
	incontinence, fecal incontinence or pelvic	
	organ prolapses) without prior assessment	
	of pelvic floor muscle function Do not use continuous passive motion	musculoskeletal
	machines for the postoperative management	(Knee)
	of patients following uncomplicated total	
USA	knee replacement	
(n=5)	Do not use (superficial or deep) heat to	mixed
	obtain clinically important long-term outcomes in musculoskeletal conditions	
	Do not prescribe under-dosed strength	mixed
	training programs for older adults. Instead,	
	match the frequency, intensity, and duration	
	of exercise to the individual's abilities and	
	goals	. ,
	Do not recommend bed rest following the	mixed
	diagnosis of acute deep vein thrombosis (DVT) after the initiation of anti-coagulation	
	therapy unless significant medical concerns	
	are present	
	Do not use whirlpool for wound	mixed
	management	
	Avoid instructions for correct lifting technique as a means of preventing back	musculoskeletal (Back)
Norway	problems in workers who work with manual	(Dack)
(n=15)	handling	
,		
	Avoid rapid (cavitating) joint manipulation	musculoskeletal
	techniques on infants' necks in torticollis	(Neck)
	techniques on infants' necks in torticollis Avoid treatment of the standard variant	(Neck) musculoskeletal
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot	(Neck) musculoskeletal (Foot)
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching	(Neck) musculoskeletal
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot	(Neck) musculoskeletal (Foot)
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional	(Neck) musculoskeletal (Foot)
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device	(Neck) musculoskeletal (Foot) mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical	(Neck) musculoskeletal (Foot)
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders	(Neck) musculoskeletal (Foot) mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that	(Neck) musculoskeletal (Foot) mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders	(Neck) musculoskeletal (Foot) mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or	(Neck) musculoskeletal (Foot) mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate	(Neck) musculoskeletal (Foot) mixed mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for	(Neck) musculoskeletal (Foot) mixed
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	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for musculoskeletal disorders when there is no suspicion of underlying or severe pathology with treatment implications Avoid concepts and explanations that can give an unfavorable understanding of the disease and lead to inappropriate health	(Neck) musculoskeletal (Foot) mixed mixed mixed mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for musculoskeletal disorders when there is no suspicion of underlying or severe pathology with treatment implications Avoid concepts and explanations that can give an unfavorable understanding of the disease and lead to inappropriate health choices	(Neck) musculoskeletal (Foot) mixed mixed mixed mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for musculoskeletal disorders when there is no suspicion of underlying or severe pathology with treatment implications Avoid concepts and explanations that can give an unfavorable understanding of the disease and lead to inappropriate health choices Avoid using manual lymphatic drainage	(Neck) musculoskeletal (Foot) mixed mixed mixed mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for musculoskeletal disorders when there is no suspicion of underlying or severe pathology with treatment implications Avoid concepts and explanations that can give an unfavorable understanding of the disease and lead to inappropriate health choices Avoid using manual lymphatic drainage without any documented effect. Focus on	(Neck) musculoskeletal (Foot) mixed mixed mixed mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for musculoskeletal disorders when there is no suspicion of underlying or severe pathology with treatment implications Avoid concepts and explanations that can give an unfavorable understanding of the disease and lead to inappropriate health choices Avoid using manual lymphatic drainage without any documented effect. Focus on compression, physical activity, and diet	(Neck) musculoskeletal (Foot) mixed mixed mixed mixed
	techniques on infants' necks in torticollis Avoid treatment of the standard variant symptom-free soft/flexible flatfoot Avoid short-term manual passive stretching of spastic muscles without additional treatment (such as botox and surgery); not including long-term stretching in standing frame or similar device Avoid referring to assessment for surgical treatment of musculoskeletal disorders where the knowledge base shows that rehabilitation measures are comparable or better Avoid sick leave if maintaining occupational activity is appropriate Avoid diagnostic imaging for musculoskeletal disorders when there is no suspicion of underlying or severe pathology with treatment implications Avoid concepts and explanations that can give an unfavorable understanding of the disease and lead to inappropriate health choices Avoid using manual lymphatic drainage without any documented effect. Focus on	(Neck) musculoskeletal (Foot) mixed mixed mixed mixed mixed
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Table 1 (continued)

Country	Choosing wisely recommendation	Physical therapy field
	Avoid pelvic floor training with a physical therapist if results have not been forthcoming after daily strength training of the pelvic floor muscles for 3 to 6 months,	women's health
	vaginal physical therapy examination, and individual follow-up. In such cases, referral	
	for further investigation is needed Avoid unnecessary early diagnosis of rectus diastasis in women after childbirth	women's health
	Avoid recommending alternative, commercial, and potentially expensive	women's health
	treatment options without documented clinical efficacy for the treatment of pelvic floor conditions such as urinary	
	incontinence and pelvic prolapse Avoid telling women with mild and moderate rectus diastasis that this may cause pelvic floor complaints and pelvic	women's health
	joint/lower back pain Do not use percussion, clapping, vibration or postural drainage to promote elimination of	cardiorespirator
Spain (n=5)	respiratory secretions Do not use only passive techniques in the treatment of chronic tendinopathies,	mixed
	because active therapy is more effective It is not recommended to use the "one leg	mixed
	stand" test Do not delay the start of physical therapy treatment in Parkinson's disease until the	neurology
	appearance of movement difficulties Do not use self-passive pulley exercises in the treatment of the upper limb of the	neurology
	hemiplegic patient Patients with back pain should not be treated exclusively with passive methods for a long period	musculoskeletal (Back)
Switzerland	Knee/hip osteoarthritis should not be treated over a long period or exclusively with passive methods	musculoskeletal (Knee)
(n=6)	After inserting an artificial knee joint, a passive knee movement machine should not	musculoskeletal (Knee)
	be used routinely Do not use percussion, clapping, vibration or postural drainage to promote elimination of	cardiorespirator
	respiratory secretions No isolated application of heat to treat musculoskeletal problems	mixed
	No therapy with ultrasound for shoulder tendon disorders, ankle sprains, and lower back pain	mixed
Tealer	Do not use mechanical or manual traction, as a single treatment or in combination with	musculoskeletal (Back)
Italy (n=5)	other treatments, in patients with low back pain, in the presence or absence of radicular pain	
	Do not use continuous passive mobilization devices for postsurgical treatment of knee ligament reconstructions or uncomplicated	musculoskeletal (Knee)
	hip or knee arthroplasties Do not use specific exercises of selective strengthening of the vastus medialis	musculoskeletal (Knee)
	obliquus in patellofemoral pain syndrome Do not teach or have patients with acute or chronic respiratory diseases practice	cardiorespirator
	diaphragmatic breathing Do not use ultrasound therapy for rotator cuff tendinopathy, ankle sprains and low	mixed

(6; 9.7 %), Switzerland (6; 9.7 %), Italy (5; 8.0 %), the USA (5; 8.0 %), and Spain (5; 8.0 %). Table 1 presents all identified Choosing Wisely recommendations.

Discussion

We aimed to identify physical therapy associations participating in the CWC and characterize the content of their recommendations. We identified 127 physical therapy associations listed on the World Physiotherapy website. Of these, seven associations from Brazil, the USA, Norway, Italy, Australia, Spain, and Switzerland confirmed having a CWC. A total of 62 recommendations were identified, most of which related to musculoskeletal physical therapy. Brazil had the highest number of CWC recommendations, with 15 related to musculoskeletal physical therapy and five to women's health.

Our findings indicate that a significant number of physical therapy associations may not have adopted CWC. In fact, despite explaining the CWC in our contact message, many associations were still unaware of this initiative. It is crucial for physical therapy associations to recognize the potential of CWC in reducing low-value care, as well as the fact that physical therapists are more likely to follow CWC recommendations especially when they are detailed and positively framed. To maximize the impact of CWC, it is essential to communicate the campaign's message clearly, emphasizing the importance of improving quality, preventing harm, and engaging both practitioners and patients in discussions about appropriate care.

Implementing CWC requires careful consideration of potential barriers, which include (i) clinicians' beliefs, experience, and knowledge, (ii) patients' clinical presentation, beliefs, and expectations, (iii) workplace demands and culture, and (iv) vague recommendations, restrictive language, and lack of awareness. ¹⁰ To address these challenges, proposed solutions include (i) conducting educational meetings about CWC, (ii) understanding the reasons behind patient requests and engaging in shared decision-making, (iii) prioritizing time spent with patients over performing unnecessary interventions, and (iv) discussing the evidence for each recommendation with transparency.

The main strength of this study was its ability to provide a comprehensive overview of CWCs in physical therapy by examining all associations that are members of World Physiotherapy. To the best of our knowledge, such an overview has not been conducted. The main limitation of this study is the low response rate, despite our efforts to address this by sending three emails at different times and reaching out to World Physiotherapy. Another potential limitation is that some CWC were not available in English. To address this, we requested that the associations provide translations of their recommendations.

CWCs represent an important strategy for enhancing communication between patients and clinicians by helping patients understand the benefits and risks of treatment options, clarifying uncertainties, and ensuring decisions align with individual values and preferences. During the development of recommendations, physical therapy associations should rely on the best available evidence and clearly communicate when strong evidence indicates that a service provides no benefit to most patients. ¹¹ Given this, CWC lists should be regularly reviewed and updated as new evidence emerges. We recommend that physical therapy associations adopt CWC in their countries and that World Physiotherapy compile global recommendations. Further discussion is needed to assess the impact on clinical practice and identify effective strategies for implementation and dissemination.

Conclusion

The identified Choosing Wisely recommendations highlight key areas of low-value care in physical therapy, especially in musculoskeletal practice. The adoption of Choosing Wisely campaigns among physical therapy associations seems to be limited. These findings underscore the opportunity for broader engagement with Choosing Wisely campaigns to reduce low-value care in physical therapy worldwide.

Declaration of competing interest

The authors declare that they have no competing interests related to this work.

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