ELSEVIER

Contents lists available at ScienceDirect

Integrative Medicine Research

journal homepage: www.elsevier.com/locate/imr



Commentary

Implementing accountable care organizations with integrative medicine in Korean health care system



Bo-Young Youn^a, Bo-Hyoung Jang^b, Chunhoo Cheon^b, Seong-Gyu Ko^{b,*}

- ^a Department of Global Public Health and Korean Medicine Management, Graduate School, Kyung Hee University, Seoul, Republic of Korea
- ^b Department of Preventive Medicine, College of Korean Medicine, Kyung Hee University, Seoul, Republic of Korea

ARTICLE INFO

Article history:
Received 19 October 2020
Revised 29 November 2020
Accepted 30 November 2020
Available online xxx

Keywords:
Health policy
Integrative medicine
Accountable care organization
Complementary and alternative medicine
Korean medicine doctor

The Accountable Care Organization (ACO) is a payer-provider partnership model of health care delivery based on four fundamental goals: improve quality of care, reduce unnecessary costs, promote coordinated care and strengthen preventive care services. The ACO program was created in the *Patient Protection and Affordable Care act* (PPACA) to become accountable for the overall care and costs of the Medicare beneficiaries. ACOs can be formed among primary care physicians, specialists and hospitals to jointly care for patients while seeking financial incentives for shared savings. ¹

According to the National Association of ACOs, there are 558 organizations serving more than 12.3 million beneficiaries in the United States as of January 2020.² More importantly, ACOs in the Medicare Shared Saving Program saved \$739.4 million in 2018.³

In early 2020, Korea has started the Korean style-ACO pilot program with one designated hospital for each region.⁴ Korea's interest in the ACO system has sparked since the Korean health insurance system has been struggling with financial depletion; Korea has learned that the Medicare ACO model has been remarkably successful in decreasing healthcare costs and increasing overall quality of care in the United States.

Due to the significant increase in chronic disease in the elderly population, medical expenses are also increasing rapidly every day in Korea. It is therefore vital to shift care from hospitals to low-cost settings by creating integrated traditional-conventional medicine collaboration to focus on prevention, disease management and palliative care.

As a vast number of patients are currently using Korean Medicine to treat various illnesses in Korea, the potential involvement of Korean Medicine in the upcoming Korean-style ACO system will be outlined in this article.

Korean medicine is one of the most distinguished traditional medicine in the world. According to the 2017 Korean Medicine Utilization and Herbal Medicine Consumption Survey, 73.8% of the total respondents have used KM; women (79.1%) have used more than men (68.4%); adults aged 60 years and above have used the most accounting 90.6% and rural residents (73.2%) have experienced more than urban residents (77%).⁵

Along with the strong demand for Korean medicine and the relatively large KM workforce, utilization of Korean medicine practices as primary care physicians (PCP) will substantially improve access to primary care and chronic disease management.

Considering the functions and roles of primary, secondary and tertiary medical institutions have not properly established in Korea, patients are inclined to use the tertiary hospitals only. The introduction of the KM-based PCP system is much needed to hinder patient concentrations on large hospitals, acting as gatekeepers.

Integrated traditional-conventional physician-led ACO may be a superb option to reduce healthcare expenses and improve Korea's quality of care. A pilot study by Dusek et al. indicated that the patients who received integrative medicine therapies had a cost savings of \$898 per hospital admission.⁶ In addition, recruited pa-

^{*} Corresponding author at: Department of Preventive Medicine, College of Korean Medicine, Kyung Hee University, 1 Hoegi, Seoul, Republic of Korea. E-mail address: epiko@khu.ac.kr (S.-G. Ko).

tients at a large California community hospital reported substantial improvements in their overall health and mentioned that an integrative health clinic could co-exist at a western medical center.⁷ (#3)

Although traditional-conventional physicians have been working together at various Korean medicine hospitals, not many referrals have been made to Korean medicine clinics from conventional medicine clinics. This may be the best time to seek strategic partnerships between traditional and conventional physicians.

Physician-led ACOs participating in the Medicare Shared Savings Program are significantly outperforming hospital-led ACOs. Especially, the new ACOs are increasingly led by physician groups rather than hospital groups. In 2018, physician group—led ACOs represented approximately 45% of all ACOs, hospital-led ACOs accounted for approximately 25%, and joint-led ACOs represented 30%. There is greater market potential for new physician-led ACOs than for those led by hospital systems; hence, physician-led ACOs will likely be the dominant type of ACO in the future.⁸

In a situation where chronic diseases are gradually expanding, patients are in need of continuous management at the community level, not the advanced medical services at the tertiary hospitals. With that said, the Korean style integrated ACO model should consider an option to limit the utilization within communities. The urban-rural healthcare gaps will certainly minimize as providers are expected to share the responsibility of a defined population for the overall costs and quality of care in the ACO model. By promoting care coordination throughout the country, it is also expected to reduce waste or duplication of services across the care continuum. (#4)

Unfortunately, the practice of medicine is heavily focused on treatment in Korea; providing healthcare service through a network of local medical institutions will benefit patients to receive continuity of care and have greater access to preventive care. It is important to help providers understand that prevention has long-term economic effects that reach far beyond medical costs.

Overcoming physician attitudes favoring autonomy rather than collaboration will pose a major challenge to pursue an integrated ACO in Korea. By implementing integrated strategic partnerships, patient satisfaction will improve by providing quality services and patient referral management to reduce duplication and unnecessary services.

As patients do not have enough barriers to visit any clinics and hospitals in Korea, it automatically builds up competitiveness rather than cooperativeness. Moreover, the preference for patients to use the tertiary hospitals is strong so that inefficiency of hospitals is a pervasive problem. Thus, promoting strategic partnership of providers will not only disperse patient concentration in tertiary hospitals but also substantially improve chronic disease management.

Most importantly, it is difficult to implement a supply system model in which cost saving or reduction is shared among suppliers by providing integrated and coordinated care in Korea. Therefore, payment reform is required to support providers.

As a basis for achieving quality and cost reduction at the same time, it is necessary to develop an integrated healthcare system. This may be difficult and will take a long time to achieve, incorporating the Korean medicine-conventional medicine education curricular should be the essential first step. The integration of training and education program for both Korean medicine and conventional medicine has proposed previously, but it has yet to accomplish.

Promoting the integrated traditional-conventional ACO will evolve toward a model that will require ongoing investment in both technology and personnel to enable team-based care. Building the necessary infrastructure related to administration, electronic health record system establishment and maintenance can be costly; however, Korean government should invest and support the

combined effort as sharing patient data among the providers will improve patient quality of care and overall outcomes.¹⁰

The opportunity to boost integrative medicine, reduce cost and improve quality of healthcare in Korea is immense.

Even in the U.S. health care system, where private insurance is mainly developed and medical technology is rapidly developing, ¹¹ the rate of increase in medical costs is faster than in any other country. Concerns over rising medical expenses due to an aging population and an increase in the number of people with chronic diseases are not unique to Korea.

Therefore, engaging Korean Medicine physicians into the integrated-ACO model is an innovative alternative to Korea's health care delivery system for two main reasons. They are trained to examine patients' overall health regardless of the present symptoms and are easily accessible as most of the physicians have their local clinics. Second, KM physicians have earned trust from elderly patients, managing their chronic diseases, treating various musculoskeletal disorders, etc. It is noteworthy that traditional medicine physicians are generally better at doctor-elderly patient communication than conventional medicine physicians. ¹² (#5)

As a stringent recommendation, it is vital for Korean healthcare delivery system to move from traditional fee-for-service payment to value-based alternative payment models, such as accountable care organizations. On average, ACO patients are spending modestly less on health care services and are associated with improved patient satisfaction and other patient-reported measures.¹³

Hence, the promotion of the Korean style integrated traditional-conventional ACO will transform the current Korean volume-based payment system to a value-based system will not only improve the overall level of public health but also control the increase of the health insurance expenditure.

Author contributions

Investigation: BYY, CHC, BHJ and SGK. Writing – Original Draft: BYY. Writing – Review & Editing: BYY, BHJ and CHC. Supervision: BHJ and SGK.

Conflict of interest

The authors have no conflict of interest to declare.

Funding

None.

Ethical statement

Not applicable.

Data availability

Not applicable.

References

- American Hospital Association. AHA research synthesis report: accountable care organization. 2010 Committee on research. Chicago, United States: American Hospital Association: 2010.
- National Association of ACOs. NAACOS website 2020. https://www.naacos.com/. Accessed October 1, 2020.
- 3. Revcycle Intelligence. Medicare shared savings program ACOs saved \$739=M in 2018, 2019. https://revcycleintelligence.com/news/medicare-shared-savings-program-acos-saved-739m-in-2018. Published 2019. Accessed October 1, 2020.
- Ministry of Health and Welfare (South Korea). Promotion of Designation of accountable care organizations for cooperation in essential medical services in the region 2020. http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR_MENU_ ID=04&MENU_ID=0403&CONT_SEQ=352960&page=1. Published 2020. Accessed October 1. 2020.

- 5. Ministry of Health and Welfare. 2017 Korean medicine utilization and herbal medicine consumption survey. Seoul, South Korea: Ministry of Health and Wel-
- 6. Dusek J, Griffin K, Finch M, Rivard R, Watson D. Cost savings from reducing pain through the delivery of integrative medicine program to hospitalized patients. J Altern Complement Med. 2018;24(6):1–7.
- 7. Gannotta R, Malik S, Chan A, Urgun K, Hsu F, Vadera S. 2018. Integrative
- Gamiotta K, Maiik S, Chai A, Orgun K, Fisu F, Vadera S. 2018. Integrative medicine as a vital component of patient care. Cureus 10:e3098.
 Muhlestein D, Tu T, Colla C. Accountable care organizations are increasingly led by physician groups rather than hospital systems. *Am J Manag Care*. 2020;26:225–228.
- 9. Kaufman B, Spivack B, Stearns S, Song P, O'Brien E. Impact of accountable care organizations on utilization, care, and outcomes: a systematic review. Med Care Res Rev. 2017:1-36.
- 10. Hofler R, Ortiz J. Costs of accountable care organization participation for primary care providers: early stage results. *BMC Health Serv Res*. 2015;16:315–322.

 11. Ridic G, Gleason S, Ridic O. Comparisons of health care systems in United States,
 - Germany and Canada. Mater Sociomed. 2020;24:112–120.
- 12. Jin Y, Tay D. Comparing doctor-elderly patient communication between traditional Chinese medicine and Western medicine encounters: data from China. Commun Med. 2017;14:121–134.
- 13. Colla C, Fisher E. Moving forward with accountable care organizations: some answers, more questions. *JAMA*. 2017;177:527–528.