Framework for Decision-making for Older Adults with Multiple Chronic Conditions: Executive Summary of Action Steps for the AGS Guiding Principles on the Care of Older Adults with Multimorbidity

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MULTIPLE CHRONIC CONDITIONS ACTION STEPS

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This framework is approved and endorsed by the American Geriatrics Society.

The American College of Physicians endorses this paper, affirming the value of the framework to the practice of internal medicine. This paper is not considered ACP policy.

The American College of Cardiology supports the general principles in the document and believes it is of general benefit to its membership.

ABSTRACT

Caring for older adults with multiple chronic conditions (MCCs) is challenging. The American Geriatrics Society (AGS) previously developed The AGS Guiding Principles for the Care of Older Adults with Multimorbidity using a systematic review of the literature and consensus (**Table 1**). The objective of the current work was to translate these principles into a framework of Actions and accompanying Action Steps for decision-making for clinicians who provide both primary and specialty care to older people with MCCs. A workgroup of geriatricians, cardiologists, and generalists: 1) articulated the core MCC Actions and the Action Steps needed to carry out the Actions; 2) provided decisional tips and communication scripts for implementing the Actions and Action Steps, using commonly encountered situations: 3) performed a scoping review to identify evidence-based, validated tools for carrying out the MCC Actions and Action Steps; and 4) identified potential barriers to, and mitigating factors for, implementing the MCC Actions. The recommended MCC Actions include: 1) Identify and communicate patients' health priorities and health trajectory; 2) Stop, start, or continue care based on health priorities, potential benefit versus harm and burden, and health trajectory; and 3) align decisions and care among patients, caregivers, and other clinicians with patients' health priorities and health trajectory. The tips and scripts for carrying out these Actions are included in the full MCC Action Framework available in the supplement (www.GeriatricsCareOnline.org).

Keywords: multiple chronic conditions, multimorbidity, AGS Guiding Principles

INTRODUCTION

Why MCC Guiding Principles and Action Framework are Needed

Caring for older adults with multiple chronic conditions (MCC) is challenging.[1-3] In 2010, the American Geriatrics Society (AGS) convened an expert panel to address how to provide patient-centered care for this growing population. The AGS Guiding Principles for the Care of Older Adults with Multimorbidity (hereafter referred to as MCC Guiding Principles) were developed using a systematic review of the literature and consensus.[4] The five MCC Guiding Principles are listed in **Table 1**.

Current care for older adults with MCCs can be burdensome, of uncertain benefit and potential harm, includes conflicting recommendations, and is not always focused on what matters most to these individuals.[6-15] The objective of the current work was to translate the AGS Guiding Principles for the Care of Older Adults with Multimorbidty (See **Table 1**) (hereafter referred to as the MCC Guiding Principles) into a framework for decision-making for clinicians who provide both primary and specialty care to older people with MCCs.[4,5] (**Figure 1**)

Variable health priorities, tradeoffs, and treatment burden: Older adults with MCCs vary in their health outcome goals and care preferences, particularly when faced with tradeoffs.[6,7] Furthermore, the accumulated effect of preventing or treating each disease, risk factor, and health complaint often results in treatment burden.[8-14] Decision-making for individuals with MCCs should involve explicit consideration of a variety of care options according to the tradeoffs among potential benefits, burden, and harms,

with the optimal choice determined by individuals' specific health outcome goals and healthcare preferences.[7,15-18]

Uncertainty of disease-specific guidelines: Decision-making is more uncertain for older adults with MCCs than for other populations due to lack of applicable evidence and limitations of disease-based decision-making:

- ***Lack of evidence applicable to older people with MCC:*** Older adults with MCCs are excluded from RCTs that generate evidence or are not enrolled in representative numbers.[19-24] Most trials focus on survival or specific disease measures or events.[14] These trials may not include function, symptom relief, or quality-of-life, outcomes important to older persons with MCCs.[7] There is also uncertainty as to whether benefits exceed harms or whether the often-modest benefits offset the burden in the face of multiple other important outcomes, conditions, and treatments.[25]

- ***Limitations of disease-based decision-making in persons with MCCs****:* Current approaches to guideline development and implementation usually focus on single diseases, which may have limited relevance to those with MCCs.[14,26-29] It is often unclear which condition(s) contribute to an individual's function, symptoms, quality-of-life, or survival, and consequently, which conditions should be the main treatment targets.[30] Interventions that benefit one condition may worsen or complicate treatment of another condition.[31]

MCC Action Framework as a means for addressing uncertainty: Decisions based on disease-specific guidelines are usually appropriate for older adults with few conditions or functional limitations. Conversely, most clinicians acknowledge that care should focus on symptom management and palliation for individuals with advanced illness and limited life expectancy. While appropriate for all ages, the MCC Action Steps were created to facilitate decision-making in the face of uncertainty for the large segment of older adults with increasing numbers of chronic conditions and functional limitations (**Figure 2**). The framework filters care options through the lens of patients' health outcome goals, healthcare preferences, and likely health trajectory, while minimizing harm and burden.

METHODS:

The MCC Actions and Action Steps were developed through an iterative process with input, and ultimate agreement, from a workgroup that included clinicians representing geriatrics (including the co-Chair of the AGS expert panel that had developed the MCC Guiding Principles), cardiology, general internal medicine, and primary care. Cardiologists were included because they are responsible for much of the decision-making for this population. The workgroup began with the existing MCC Guiding Principles, which were extensively researched and vetted.[5] The workgroup translated these principles into actions that are feasible in current clinical practice. To create the MCC Action Framework, the workgroup: 1) articulated the core MCC Actions and the Action Steps needed to carry out the Actions; 2) provided decisional tips and

communication scripts for implementing the Actions and Action Steps, using commonly encountered situations: 3) performed a scoping review to identify evidence-based, validated tools for carrying out the MCC Actions and Action Steps; and 4) identified potential barriers to, and mitigating factors for, implementing the MCC Actions. The tools and clinical scenarios are illustrative and not meant to be an exhaustive listing. Components of the Actions were applied in a pilot project during which they were modified based on clinician feedback and experience.[32-34] The workgroup provided iterative feedback during the development of the Framework and voted unanimous agreement on the Actions, Action Steps, and final version of the manuscript.

RATIONALE for the MCC STEPS

Identify and incorporate patients' health priorities into decision-making

Respecting patients' goals and preferences is a tenet of patient-centered care for everyone,[35] but is perhaps particularly relevant for older adults with MCCs because of variability in conditions, health priorities, and life context.[4,6] Patients' specific health priorities give clinicians an anchor for decision-making and communication in the face of uncertainty and variability.[36,37] Furthermore, decisions based on patients' healthcare preferences improves adherence.[18] Even persons who desire clinicians to make most decisions want their preferences considered.[38,39] Aligning care (treatment) options with patients' health priorities also lessens the likelihood of conflicting recommendations and treatment burden if all clinicians focus on the same priorities.

Assess and incorporate patients' health trajectory into decision-making

Health trajectory includes likelihood of death in the next few years, as well as likely patterns of change in function, health status, and quality-of-life, which older adults with MCCs often prioritize[4,.5] While there are few predictive tools to address prognosis for such outcomes, health trajectory for these outcomes may be more important than quantity of life for many older adults with MCC.[40,41]

Many preventive interventions, and some chronic disease treatments, offer no immediate benefit to symptoms, function, or quality-of-life and have a long lag-time to benefit. Such interventions may cause harm or burden to persons unlikely to live long enough or be functional enough to experience future benefit. Persons vary in the priority they place on preventing a future bad event versus the priority they place on their current function, symptoms, and treatment burden.[16]

Avoid use of harmful treatments

Avoiding harm is a core precept of healthcare for all patients. People with MCCs are particularly likely to experience harms because of the effects of multiple interventions, conditions that pose potential interactions, and physiological changes with aging. Harm greater than benefit may occur because benefits are modest in the face of multiple coexisting conditions, or because of the high risk of harm or competing event before the intended benefits can accrue.[19] The higher baseline risk of some outcomes

may not translate into greater net benefit when all outcomes are considered for older adults with MCCs.

Ensure use of beneficial treatments

Potentially beneficial interventions may be neglected due to clinical inertia or concern about overburdening patients.[42] Potentially beneficial interventions may be preventive, diagnostic, treatment, palliative, rehabilitative, or supportive. A caveat to interpreting evidence of underuse of disease-specific and preventive interventions is that many studies did not include older adults with MCCs or address outcomes of importance to this population.[14,19-24]

Minimize treatment burden

Minimizing treatment burden and complexity is an increasingly recognized need for persons with MCCs.[8-15] These patients and their caregivers spend an average of two hours a day on healthcare-related activities and two hours on each of their many health care visits.[8] More than 40% of older adults acknowledge some degree of treatment burden which represents an underappreciated yet modifiable source of nonadherence.[17,18] Removing healthcare that is burdensome and not beneficial creates opportunity to start care that is beneficial and consistent with the patient's health priorities.

Align care decisions among patients, family/caregivers, and clinicians

Healthcare in which each clinician focuses only on his/her own domain and condition-specific outcomes leads to fragmentation, conflicting recommendations, treatment burden, and care that is not always focused on what matters most to patients. Decision-making and communication aligned with patients' priorities puts everyone on the same page thus minimizing these problems.[43] Communication and aligned decision-making among patients, family/caregivers, and clinicians are key to implementation of the MCC Action Steps.

ACTIONS AND ACTION STEPS FOR CARE OF OLDER ADULTS WITH MULTIPLE CHRONIC CONDITIONS

These MCC Actions and Action Steps provide a continuous process for decision-making. Follow the MCC Actions and Action Step(s) relevant to each patient's situation (**Table 2**). Tips and scripts that support the Action Steps are included in the supplement (www.GeriatricsCareOnline.org).

MCC ACTION: IDENTIFY AND COMMUNICATE PATIENTS' HEALTH PRIORITIES AND HEALTH TRAJECTORY

- **Identify and communicate patients' health priorities**
    - *Use a validated approach to identifying patient's health priorities*

Clinically feasible approaches for identifying patients' health priorities are emerging.[33,44-53] Some approaches are appropriate for all older adults with MCCs; others are focused on persons with advanced illness or facing major decisions. Examples include:

For all older adults with MCCs:

- Patient Priorities Identification[33] (patientprioritiescare.org)
- Validated questions for exploring patients' health priorities (GeriatricsCareOnline.org).

For persons with advanced illness:

- VITALtalk[49] (vitaltalk.org)
- Prepare for your care[50] (prepare.org)

For major decisions:

- Best case-worst case-likely case scenarios[51]

- *Communicate patients' health priorities*

Patient priorities, goals, and preferences should be documented in a site accessible by all clinicians and healthcare team members. All clinicians should be aware of patients' priorities, goals, and preferences and use them in

communications with patients and other clinicians and in decision-making as described below.

- **Assess and patients' health trajectory**

  - *Estimate life expectancy, health trajectory, and lag-time (time horizon) to benefit:*

    Estimate life expectancy:

    - ePrognosis is a repository of evidence-based prognostic indices for older adults and includes a calculator for translating mortality risk into median life expectancy.[52,53]

    Consider patients' health trajectory:

    - While there are few predictive tools to address prognosis for outcomes such as function or quality-of-life, consider likely changes over 1-2 years.

    -Lack of return to prehospital function predicts poor health trajectory.[41]

    Estimate lag-time (time horizon) to benefit:

    -Time to benefit for treatments (lag-time) may be longer than the individual's projected life span,[54,55] and varies for different interventions.[56]

- Consider timeframes of 1-2 years, 2-5 years, 6-10 years, and 10+ years.[57,58]

- **Determine patients' readiness to discuss their trajectory or prognosis**

Patients vary in how much and how they wish to discuss health trajectory and prognosis.[59-62] Explore what information the patient is interested in discussing (e.g. how long they may live or be able to live independently, or whether they will likely need frequent hospitalizations).

- **Assess patients' perceptions of their prognosis and trajectory**

Use questions such as, *"What is your understanding of how your illnesses will affect your day to day life, and your health?* Or *How do you think the next six months or year or few years will be for you in terms of your health and function?*

MCC ACTION: STOP, START, OR CONTINUE CARE BASED ON HEALTH PRIORITIES, POTENTIAL BENEFIT VERSUS HARM AND BURDEN, AND HEALTH TRAJECTORY

Healthcare activities, including medications, healthcare visits, testing, and self-management tasks accumulate while patient's health status and health priorities change over time. Tradeoffs between benefit and harm/burden varies depending on individuals' health outcome goals, healthcare preferences, and health trajectory. Eliminate harmful, inappropriate, or overly burdensome treatments unless there is clear evidence of

benefits greater than harm in an individual. For primary care providers, this should include a comprehensive review of medications and self-management tasks. Specialists should review and address all treatments under their purview and be attuned to potential interactions or treatments that worsen other conditions.

Considerations on starting, continuing, or stopping all aspects of care should occur continuously based on whether the care remains indicated, the benefits - as defined by patients' health priorities - outweigh harms, and whether there are additional healthcare activities that would enhance achievement of patient's goals and be consistent with healthcare preferences.

The aim of decision-making should be to:

- STOP CARE that is harmful, inconsistent with the patient's health priorities, too burdensome, or that is inappropriate based on health trajectory if stopping is consistent with the patient's care preferences.

- START OR CONTINUE CARE that is beneficial and consistent with the patient's health priorities and not too burdensome.

- **Acknowledge and communicate uncertainty to patients and other clinicians** [19-21,34,36,37]

Acknowledging and communicating uncertainty to patients and other clinicians supports discussion of patient's priorities and the use of other information in decision-making.

- **Use patients' priorities as the focus of decision-making and communication**

  Frame the pros and cons of treatment and care options around each patient's priorities, not just disease-based tradeoffs.[34,48, 63] Discuss treatments in the context of helping patients do what is important to them.

- **Stop or do not start medications for whom harm or burden may outweigh benefit for older adults**

  - *Stop medications deemed inappropriate in older adults* [64,65]
  - *Avoid medication cascades*[66]
  - *Consider whether treatments may be contributing to symptoms and perform serial trials of discontinuing possible contributing treatments*[34]
  - *Discontinue or decrease treatments no longer indicated or needed* [67-76]
  - *Review and adjust self-management tasks* [73,77]

- **Consider whether patient has advanced illness or limited life expectancy that affects benefits and harms of treatments**

- *Consider health trajectory and time to benefit for preventive interventions*

- *Explain cessation of screening and prevention as a shift in priorities and use positive messaging* [53,60,78,79]

MCC ACTION: ALIGN DECISIONS AND CARE AMONG PATIENTS, CAREGIVERS, AND OTHER CLINICIANS WITH PATIENTS' HEALTH PRIORITIES AND HEALTH TRAJECTORY

- **Affirm shared understanding of patients' health priorities and the information that informs decision-making**

  - *Agree on the factors and information that will inform decision-making and care*

    Everyone should use the same information to inform decisions including:

    - Patient's health priorities, health trajectory, amount of benefit for outcomes that matter to the patient; likelihood of adverse effects (e.g. falls with antihypertensive medications,[80] bleeding from anticoagulation)

    - Family perspectives and concerns[81,82]

- Life context and stresses that affect outcomes and help or hinder adherence to treatments[83]

- Competing conditions that affect outcomes, response to interventions, and patients' priorities[10,25,30]

- *Encourage patients and family/caregivers to participate in decision-making*

  - Encourage patients to discuss their health priorities and inquire about ways in which their healthcare may help them accomplish these health priorities.

  - Engage family members and companions, particularly those who regularly accompany the patient, to participate to the extent desired by the patient.[81-84]

- **Align decisions when patient and clinician have different perspectives**

Patients and clinicians may differ in their perspectives or priorities such as when a patient prioritizes avoiding adverse treatment effects or burden while the clinician is most concerned about risk of future health event or survival.

- *Link decisions to something meaningful to the patient*[34,51]

- *Ensure that patients' health outcome goals are consistent with their healthcare preferences*[34]

  - Patients may be nonadherent because they not know that there is a disconnect between their goals and what they are willing to do (their healthcare preferences

- *Identify and change bothersome aspects of treatment*

- *Accept patient's decision*

  Accepting patient's decision becomes easier when considering the often small absolute treatment benefits of individual treatments in the context of MCCs and that older adults may appropriately be more focused on current than future health and function.[57]

- **Align decisions when clinicians have different perspectives or recommendations**

Clinicians caring for the same patient may reasonably differ about treatments, often because they vary in the information used to make decisions or in the importance they place on pieces of information. They may have different interpretations of the

patient's priorities or how best to align treatment with these priorities. Resolving differences across clinicians is essential to avoiding conflicting recommendations.

- *Focus discussion on patients' health priorities not only on diseases*

- *Acknowledge absence of one "right answer" for patients with MCCs*

- *Use collaborative negotiation to arrive at shared recommendations when there are conflicting perspectives*

  - Define the issue in such a way that it becomes a common goal (i.e. how best to help the patient achieve her health priorities)

  - Make sure everyone is using the same factors and information when considering and discussing treatment options

  - Identify sources of differing recommendations (e.g. one clinician feels disease-specific guidelines don't apply; another clinician may feel benefit > harm)

  - Brainstorm therapeutic alternatives (mutual problem-solving). Often a compromise solution or planned trials for effects of changes can be agreed upon.

BARRIERS AND MITIGATING FACTORS TO IMPLEMENTING MCC ACTION STEPS

Barriers and challenges face clinicians attempting to follow these MCC guiding principles and Action Steps. Some challenges arise from a healthcare culture and evidence base entrenched in managing individual conditions that may not be appropriate for persons with MCCs. Other challenges arise from health system fragmentation and lack of organizational, communication, and workflow structures to support integrated decision-making and care. Anticipated barriers with possible mitigating factors to, as well as possible solutions for, implementing the MCC Action Steps are displayed in **Table 3**. Some solutions are more immediately implementable than others. Some require a national commitment of resources while others can be done at the health system, clinical practice, or clinician level. All are feasible.

These MCC Action Steps provide a continuous process for decision-making that is tailored to each patient's outcome goals, health trajectory, and healthcare preferences. If implemented, outcomes desired by patients with MCC will likely improve while burden and fragmentation will decrease.

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Table 1: AGS Guiding Principles for Care of Older Adults with Multimorbidity and Definitions of Terms Used in the Multiple Chronic Conditions Action Framework

Guiding Principles
• Elicit and incorporate patient (and family/caregiver) preferences into medical decision-making. • Recognize the limitations of the evidence base, interpret and apply the medical literature specifically for this population. • Frame clinical management decisions within the context of harms, burdens, benefits, and prognosis (e.g., remaining life expectancy, functional status, quality-of-life). • Consider treatment complexity and feasibility when making clinical management decisions. • Use strategies for choosing therapies that optimize benefit, minimize harm, and enhance quality-of-life.
Definition of Terms
Health outcome goals: The activities most important to the individual. The more specific, actionable, and reliable, the better the health outcome goals can inform decision-making (e.g. "*I want to be less tired so that I can babysit 2 mornings a week".* **Health trajectory**: The likelihood of death (prognosis), as well as likely patterns of change in function, health status, and quality-of-life over a defined period.

Care (or treatment) burden: The workload imposed by healthcare on patients, and the effect this workload has on quality-of-life. Categories include medications and their effects; self-management tasks; procedures; testing; and health care utilization including clinician visits, hospitalization, etc.[9]

Healthcare (or treatment) preferences: The healthcare workload that patients are willing and able (or not willing or able) to do or receive.

Health priorities: The health outcome goals a patient most desires within the context of their healthcare preferences (i.e. what health outcome goals they most desire given what they are willing and able to do to achieve them).

Table 2. Multiple Chronic Conditions Decisional Actions and Action Steps

MCC ACTION: IDENTIFY AND COMMUNICATE PATIENTS' HEALTH PRIORITIES AND HEALTH TRAJECTORY

- Identify and communicate patients' health priorities
    - Use a validated approach to identifying patient's health priorities
    - Transmit patients' health priorities
- Assess and communicate patients' health trajectory
    - Estimate life expectancy, trajectory, and lag-time (time horizon) to benefit
    - Determine patients' readiness to discuss their trajectory or prognosis
    - Assess patients' perceptions of their prognosis and trajectory

MCC ACTION: STOP, START, OR CONTINUE CARE BASED ON HEALTH PRIORITIES, POTENTIAL BENEFIT VERSUS HARM AND BURDEN, AND HEALTH TRAJECTORY

- Acknowledge uncertainty and variable health priorities in decision-making and communication
- Stop or do not start medications for which harm or burden may outweigh benefit
    - Stop medications deemed inappropriate in older adults
    - Avoid medication cascades
    - Perform serial trials if treatments may be contributing to bothersome symptoms

- Discontinue treatments no longer indicated or needed
- Review and adjust self-management tasks

- Consider whether patient has advanced illness or limited life expectancy that affects benefits and harms of treatments
  - Consider health trajectory and time to benefit for preventive interventions

Explain cessation of screening and prevention as a shift in priorities and use positive messaging

MCC ACTION: ALIGN DECISIONS AND CARE AMONG PATIENTS, CAREGIVERS, AND OTHER CLINICIANS WITH PATIENTS' HEALTH PRIORITIES AND HEALTH TRAJECTORY

- Affirm shared understanding of patients' health priorities and the information that informs decision-making
  - Agree on the factors and information that will inform decision-making and care
  - Encourage patients and family/caregivers to participate in decision-making
- Align decisions when patient and clinician have different perspectives
  - Link decision to something meaningful to the patient
  - Ensure that patients' health outcome goals are consistent with their healthcare preferences
  - Identify and change bothersome aspects of treatment
  - Accept patient's decision

- Align decisions when clinicians have different perspectives or recommendations
    - Focus discussion on patients' health priorities not only on diseases
    - Acknowledge absence of one "right answer" for patients with MCCs

Use collaborative negotiation to arrive at shared recommendations

Table 3. Barriers and Mitigating Factors to Implementing Multiple Chronic Conditions Framework

Barrier	Mitigating Factors	Potential solutions
Lack of evidence for some MCC Action Steps	The MCC Action Steps Framework provides an effective and efficient patient-centered strategy for persons for whom disease-specific evidence does not exist, for whom there is much uncertainty, and for whom trying to follow guidelines is problematic.	Large scale clinical trials of older adults with MCCs evaluating intervention effects using universal, cross disease outcomes
Disease-based quality measures discourage care following MCC guiding principles and Action Steps	Documentation of reasons for care decisions satisfies performance requirements. Patient satisfaction and adherence metrics will likely improve MACRA and the move to value-based reimbursement can support patient priorities aligned care if informed by patient-centered metrics There is increasing recognition on	Patient-centered metrics are in existence or under development that support patient priorities aligned decision-making

	part of payers and regulators that disease- and event-based metrics have unintended adverse consequences, particularly for older adults with MCCs[85]	
Lack of infrastructure to identify and communicate patient's health priorities and concerns	Patients or their families / caregivers with internet access should be encouraged to use the patients' EHR portal to transmit changing health priorities and concerns, monitor responses to treatment changes, and engage in the communication needed for decision-making.	Self-directed approaches for patients to identify their health priorities are being developed precluding need for clinician or staff time.
Lack of clinical workflow, infrastructure, and incentives for ascertaining and communicating patient's health priorities and aligning decisions among clinicians with these priorities	EHR can support messaging sites where clinicians can asynchronously discuss and negotiate shared decisions For sites without a shared EHR, secure text or Fax messaging can support asynchronous clinician-clinician communication with telephone or face to face reserved for the most complex situations	An integrated care plan, including input from relevant clinicians and residing in a shared EHR is ideal for those health systems that can implement them Telehealth and platforms that support secure messaging and virtual communication between clinicians are increasingly

		available to clinicians.[86,87] Clinicians who feel connected with other clinicians have improved professional satisfaction and patient outcomes.[88]
Lack of accountability or no mechanism for assigning responsibility; clinicians often don't know each other		Identifying and agreeing on a primary clinical decision-maker (primary care or specialist) for complex patients is time-saving.
Lack of dedicated or reimbursed time and resources to implement these actions	Proficiency in MCC Action steps will increase with experience. Once mastered, this approach will be as, or more, time efficient than current disease-by-disease approach. This is a continuous approach to decision-making and not a task that needs to be completed during a single visit	Financial incentives in integrated, capitated, or risk sharing systems favor MCC Action steps Chronic Care Management and Care Coordination E and M codes allow clinicians to be reimbursed for this work in fee-for-service settings.[89] A library of standard

		documentation for use in EHRs for documenting and communicating decisions and their rationales would ease workflow.

Figure Legend

Figure 2. The Multiple Chronic Conditions Action Steps facilitate decision-making in the face of uncertainty of disease guideline driven decision-making for the large segment of older adults with increasing numbers of chronic conditions and functional limitations

Caroline Blaum, MD, MS. Feasibility of Implementing Patient Priorities Care for Patients with Multiple Chronic Conditions. Journal of American Geriatrics Society, 2018. doi: 10.1111/jgs.15465.

Figure 1. Patient Priorities-aligned Decision-making for Older Adults with Multiple Chronic Conditions

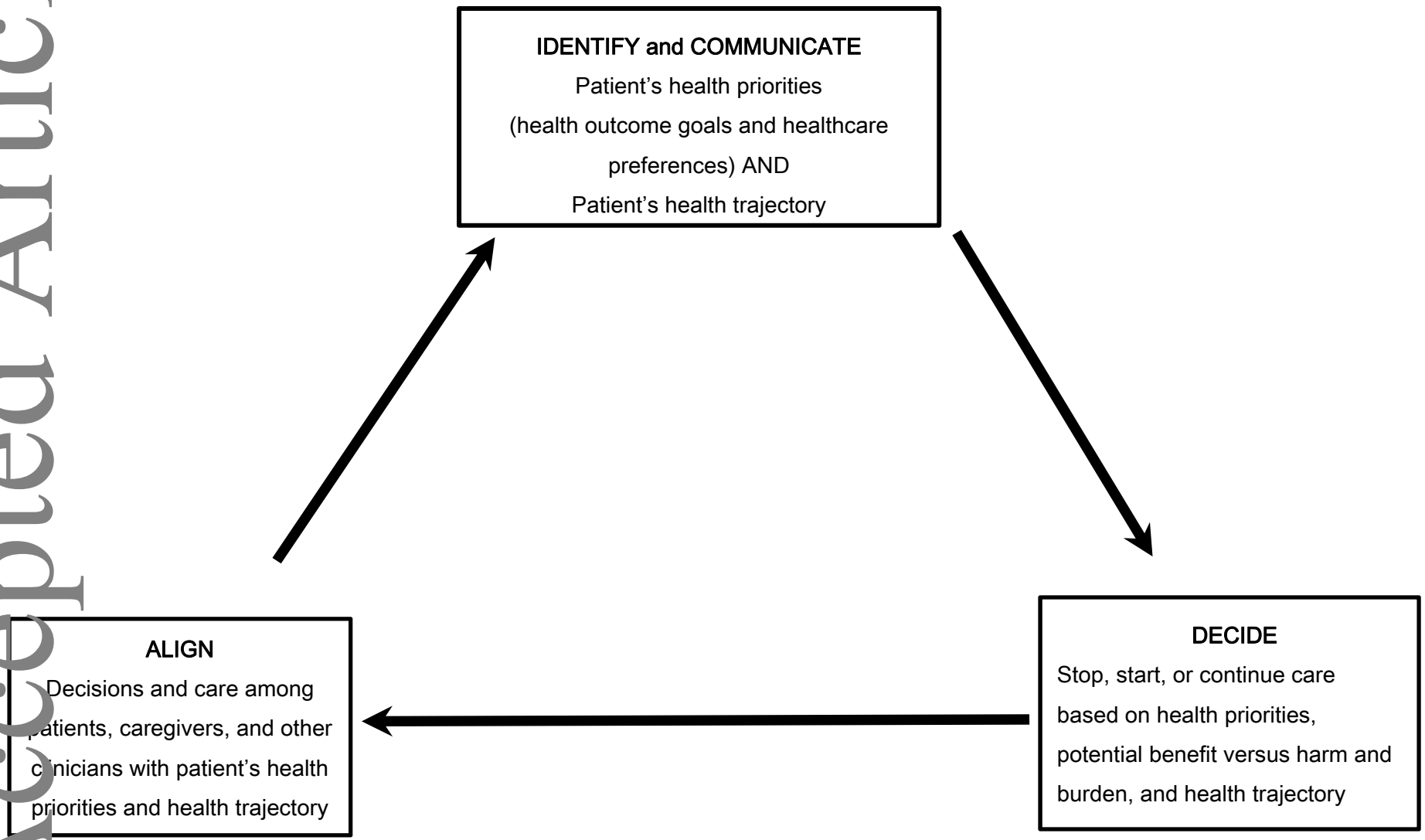

Figure 2. Decision-making and care of older adults with multiple chronic conditions