Improving Care for Patients With Stage III/IV NSCLC: Learnings for Multidisciplinary Teams From the ACCC National Quality Survey

[Abstract no: 71]

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INTRODUCTION

- Complex requirements and ever-changing guidelines for the management of stage III/IV non-small cell lung cancer (NSCLC) in a fragmented U.S. healthcare system can impede consistent access to optimal care for patients with NSCLC[1]
- Optimization of care coordination, screening, diagnosis, biomarker testing, staging, and treatment planning, along with refinement of the multidisciplinary team (MDT) approach, offers significant potential for improving the quality of NSCLC care and adherence to guideline-recommended protocols
- Multidisciplinary care in lung cancer is perceived as patient-centric and efficient, improving timelines and access to high-quality care[2]
- The Association of Community Cancer Centers (ACCC) has designed a quality metric for ideal NSCLC care (Socinski and Boehmer 2020, manuscript in preparation), which has guided the development of a national survey to improve understanding of diagnosis and management of patients with stage III/IV NSCLC across different U.S.-based practice settings and to design and execute process improvement plans to address the identified barriers

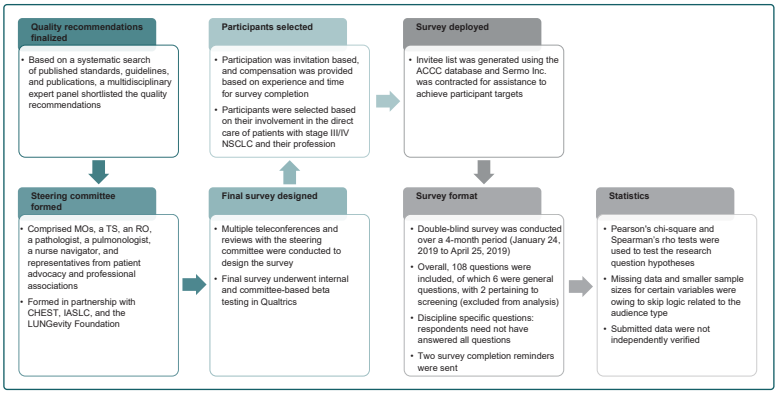
OBJECTIVES

- To evaluate the following parameters in patients with stage III/IV NSCLC among U.S. healthcare providers:
  - Understanding of evolving standards for diagnosis and management of patients
  - Adoption of guideline-recommended protocols for screening, diagnosis, and treatment
  - Investigation of coordination and communication within the multidisciplinary specialties involved in NSCLC management
  - Identification of barriers to optimal care
- The goal of the survey was to identify practice areas and patterns that would benefit from the delivery of appropriate resources and application of process improvement initiatives, thereby ensuring the highest quality of care for patients with advanced NSCLC

METHODS

- The expert steering committee guiding the development of the survey included medical oncologists, a thoracic surgeon, a radiation oncologist, a pathologist, a pulmonologist, a nurse navigator, and representatives from patient advocacy and professional associations
- The survey was conducted over 4 months between January 24, 2019 and April 25, 2019. Survey methodology is shown in **Figure 1**

Figure 1: Survey methodology



ACCC, Association of Community Cancer Centers; CHEST, American College of Chest Physicians; IASLC, International Association for the Study of Lung Cancer; MO, medical oncologist; NSCLC, non-small cell lung cancer; RO, radiation oncologist; TS, thoracic surgeon

RESULTS

Respondent disposition and characteristics

- Of the 1211 professionals selected, 639 respondents completed the survey, representing 160 unique cancer programs across 44 states in the U.S.
- The largest proportion of respondents belonged to the Community Cancer Program (CCP; 18.6%) and programs in the urban regions (57.4%) (**Supplementary Table 1 on page 2**)
- A total of 261 (40.8%) respondents were associated with program types that did not have a thoracic multidisciplinary clinic (**Supplementary Table 1 on page 2**)

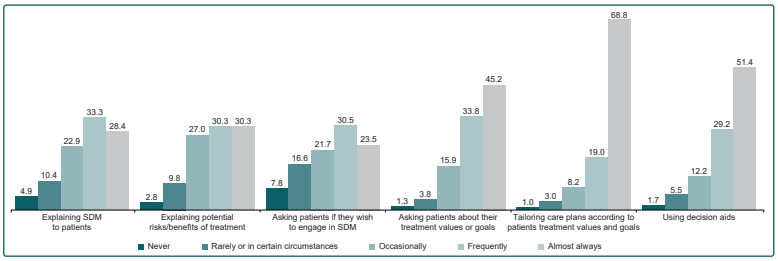
Care coordination and patient education

- A high proportion of respondents indicated that they "frequently" or "almost always" engaged in shared decision-making (SDM) (**Figure 2**)
- Nurse navigators (P = 0.03) and radiation oncologists (P = 0.04) were significantly more likely to engage in SDM

Screening, diagnosis and biomarker testing, and treatment planning

- Average length of time ± standard deviation required from initial abnormal chest imaging to complete disease staging and to initiation of treatment was 3.13 ± 1.76 weeks and 4.02 ± 1.76 weeks, respectively
  - Around 19% of respondents were associated with program types that did not offer lung cancer screening

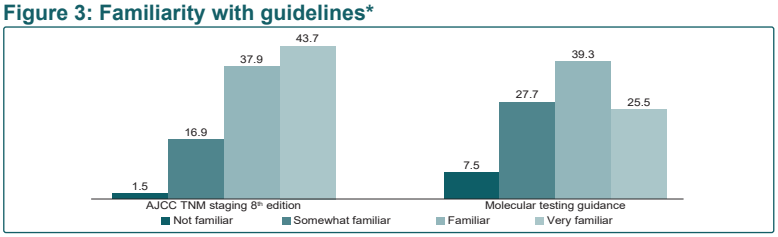
Figure 2: SDM engagement across NSCLC-treating specialties*



*All values are in percentages
NSCLC, non-small cell lung cancer; SDM, shared decision-making

- A significantly larger proportion of respondents from Comprehensive CCPs indicated that patients were screened than not screened using low-dose computed tomography (17.6% vs 8.1%; P < 0.001), whereas a significantly larger proportion of respondents from Free-Standing Cancer Center Programs indicated that patients were not screened than screened using low-dose computed tomography (13.0% vs 4.5%; P < 0.001)
  - Overall, 18.4% and 35.2% of respondents were "not" to "somewhat" familiar with the American Joint Committee on Cancer (AJCC) 8th Edition Tumor, Node, Metastasis (TNM) staging and the updated molecular testing guidelines for lung cancer, respectively (**Figure 3**)
  - In addition, 41.7% of respondents indicated that their programs did not have an existing standard protocol for biomarker testing
  - Moreover, 81.7% of respondents indicated that tumor board (TB) meetings occurred more than once a month; the frequency of TB meetings negatively correlated with disease staging time (P = 0.03)

Figure 3: Familiarity with guidelines*

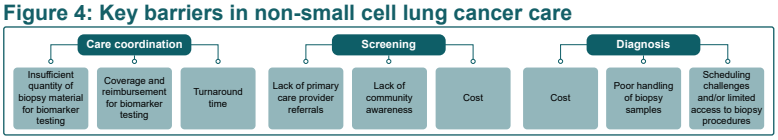


*All values are in percentages
AJCC, American Joint Committee on Cancer; TNM, Tumor, Node, Metastasis

Key barriers to delivering quality NSCLC care

- The survey identified several areas for improvement in enhancing the quality of care for patients with NSCLC (**Figure 4**)

Figure 4: Key barriers in non-small cell lung cancer care



CONCLUSIONS

- The survey provides an overview of the barriers to quality care for patients with stage III/IV NSCLC, including a lack of consistent use of MDTs, optimized diagnosis using biomarker testing, and timely, complete staging of patients in U.S. cancer programs
- Multiple opportunities exist to improve the quality and delivery of care for patients with stage III/IV NSCLC by enhancing screening, diagnosis, treatment, and care coordination for better outcomes in this patient population

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CONFLICT OF INTEREST AND DISCLOSURES

RS has an advisory/consultancy role with Iovance Biotherapeutics, AbbVie, Octimet, ARIAD, and Novartis and is a speaker for Merck and AstraZeneca. LMB has nothing to disclose. CC was an employee of and owns stocks in AstraZeneca. HY is an employee of and owns stocks in AstraZeneca. DRS has an advisory/consultancy role with Aptitude Health, AstraZeneca, Bayer, Bristol-Myers Squibb, Celgene, Dracen Pharmaceuticals, EMD Serono, Genentech, GlaxoSmithKline, Iksuda Therapeutics, Intellisphere, Merck, Molecular Templates, Novartis, Pfizer, Pharma Mar, Roche, Takeda, TRIPTYCH Health Partners, TRM Oncology, and Williams & Connolly LLP

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Supplementary Table 1: Characteristics of the survey respondents

Characteristic	Proportion, n (%)
Role	***N = 639***
Medical oncologists	114 (17.8)
Thoracic surgeons	72 (11.3)
Radiation oncologists	114 (17.8)
Pulmonologists	57 (8.9)
Pathologists	114 (17.8)
Oncology nurses, nurse navigators, and advanced practice nurses	75 (11.7)
Financial advocates, navigators, and social workers who provide financial counseling and support patient access	33 (5.2)
Pharmacists	34 (5.3)
Cancer program administrators	26 (4.1)
Program type	***N = 639***
Comprehensive Community Cancer Program	101 (15.8)
Community Cancer Program	119 (18.6)
Integrated Network Cancer Program	30 (4.7)
Academic Comprehensive Cancer Program	95 (14.9)
NCI-Designated Comprehensive Cancer Center Program	93 (14.6)
NCI-Designated Network Cancer Program	15 (2.3)
Veterans Affairs Cancer Program	5 (0.8)
Hospital Associate Cancer Program	62 (9.7)
Free-Standing Cancer Center Program	39 (6.1)
Other	80 (12.5)
Region	***N = 639***
Urban	367 (57.4)
Suburban	209 (32.7)
Rural	63 (9.9)
Presence of thoracic multidisciplinary clinic	***N = 639***
Yes	378 (59.2)
No	261 (40.8)
Disciplines present across cancer programs	***N = 639***
Thoracic surgery	342 (53.6)
Radiation oncology	348 (54.5)
Medical oncology	362 (56.7)
Pathology	298 (46.7)
Pulmonology	279 (43.7)
Pharmacy	80 (12.5)
Oncology nursing	217 (34.0)
Navigation	3 (0.5)
Palliative care	6 (0.9)
Clinical trials	11 (1.7)
Social work	166 (26.0)
Use of clinical pathway—radiotherapy alone	***N = 259***
< 10%	114 (44.0)
10%–50%	127 (49.0)
> 50%	18 (6.9)
Use of clinical pathway—chemotherapy alone	***N = 257***
< 10%	125 (48.6)
10%–50%	98 (38.1)
> 50%	34 (13.2)

NCI, National Cancer Institute