State of the Healthcare Workforce - Capitol Hill

Ralph Henderson – President, Professional Solutions and Healthcare Staffing

10/26/18
AMN Healthcare

Providing Staffing and other Workforce Solutions for many of the countries largest healthcare delivery organizations
Long Term Clinician Shortage Predictions

• By 2030 the United States will face a deficit of 121,300 physicians

• There will be a shortage of 154,018 RNs by 2020 and 510,394 RNs by 2030

Sources: 1) Association of American Medical Colleges (AAMC) forecast, 2) United States Registered Nurse Workforce Report Card and Shortage Forecast” published in the January 2012 issue of the American Journal of Medical Quality
Current Healthcare Employment Trend

For Every Hire in Healthcare There is Another Job Left Unfilled

Source: Bureau of Labor and Statistics, JOLTS Data Healthcare and Social Assistance Jobs
Causes

• 100,000’s of applicants for Nursing and Medical schools turned away annually

• High cost of medical education

• Maldistribution of physician and registered nurse supply

• Complex State Licensure processes limit mobility

• Worker classification system doesn’t support “gig economy” in Healthcare
Who Cares?

PATIENTS

OVERWORKED CLINICIANS

TAX BASE

EMPLOYERS
Opportunities

Knock down barriers to physician and clinician mobility

- Create National Licensing program for Physicians, Registered Nurses and other Clinicians
- Expand tax free educational assistance to $20k annually and include education expenses incurred pre-employment
- Expand the number of Visa’s for new Americans working in Healthcare
- Add a new “gig worker” employee classification for workers who fall between employees and independent contractor

Increase Federal funding for expansion of Nurse and Physician education programs
Thank you
TALENT FOR GROWTH AT AMGEN

CARA BAUER
EXECUTIVE DIRECTOR, TALENT
WHO IS AMGEN TODAY?

One of the world’s leading independent biotechnology companies

~ 100 countries

Reached millions of patients

In the US, have ~12.5K employees. Over 65% have a bachelors degree or higher (twice national average) and offer very attractive pay and benefits.
The business landscape continues to change at a rapid pace

- Digital world is disrupting organizations
- Changing industries demand agile staff
- Small firms challenging big firms
- Changing demographics & more contractors
- Emerging "hybrid jobs"
NEW SKILLS ARE BECOMING MORE IMPORTANT FOR THE FUTURE

Top 10 skills

<table>
<thead>
<tr>
<th>in 2020</th>
<th>in 2015</th>
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<tbody>
<tr>
<td>1. Complex Problem Solving</td>
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<tr>
<td>2. Critical Thinking</td>
<td>2. Coordinating with Others</td>
</tr>
<tr>
<td>3. Creativity</td>
<td>3. People Management</td>
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<td>4. People Management</td>
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<tr>
<td>5. Coordinating with Others</td>
<td>5. Negotiation</td>
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<tr>
<td>6. Emotional Intelligence</td>
<td>6. Quality Control</td>
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<tr>
<td>7. Judgment and Decision Making</td>
<td>7. Service Orientation</td>
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Oxford Economics Global Talent Study identified digital skills, agile thinking skills, interpersonal and communication skills, and global operating skills as the most important competencies for the future.

Studies consistently identify transferable skills as the most critical for the future.
A CONVERGENCE OF FACTORS IS CREATING A HIGHLY COMPETITIVE TALENT MARKET IN BIOPHARMA

US unemployment is at an 18 year low of 3.8%

Source: Bureau of Labor Statistics

~13,000 posted positions at 10 of our competitors

Record investment in Biotechnology Companies

- **31 IPOs** in first half of 2018
- Life sciences venture investing likely to exceed the record $17.3 billion set last year*

Strong competition for talent is the ‘new normal’ in our industry

38-40 million skilled worker deficit by 2020

WHY CHANGING OUR APPROACH TO TALENT IS IMPORTANT
EXTERNAL TRENDS WILL BECOME OUR OPERATING REALITY

External Trends

- Fast changing market
- Fast changing technology
- Demographic shift
- Expectations of transparency and individualization
- Required skills changing

Future Reality

- We can’t be left behind
- Our value proposition and employee experience needs to reflect the new reality
- We need to be flexible and evolve

Ultimately… We need the best talent in the most critical areas to innovate. Continuing to be an attractive employer is fundamental to success.
LOOKING AHEAD: HOW IS AMGEN ADAPTING TO THE “NEW NORMAL” AND ENABLING OUR GROWTH....
AMGEN FOUNDATION PORTFOLIO SUPPORTS BUILDING THE NEXT GENERATION OF STEM INNOVATORS

While individuals featured above are fictional, the experiences reflect the reality for thousands of program beneficiaries.

High School Freshman

Khan Academy

Scientific Literacy

High School Junior

AMGEN Biotech Experience

21st Century Skills

High School Senior / College Freshman

LabXchange

Scientific Competencies

Undergraduate Junior

AMGEN Scholars Program

DISCOVER YOUR POTENTIAL

MARIA

• Biology Homework
• Her Scientific Quest: How do recessive genes determine hair color?
• Her Inspiring Moment: Khan Academy video sponsored by Amgen Foundation

MICHAEL

• In the Classroom
• His Scientific Quest: How was my aunt's diabetes medicine made?
• His Inspiring Moment: Three weeks of learning about recombinant DNA through the Amgen Biotech Experience

MARTINA

• Transitioning to College
• Her Scientific Quest: How do I sharpen my lab skills before college, like doing dilutions?
• Her Inspiring Moment: Conducting simulated experiments using LabXchange made possible by the Amgen Foundation and Harvard

AJAY

• Summer Experience
• His Scientific Quest: How do I get research experience that could lead to a career in science?
• His Inspiring Moment: Working under a top biology professor at an elite university through Amgen Scholars
WE CREATE EXCITING EARLY CAREER OPPORTUNITIES

Over 175 College Interns in the US every Summer

- 45% Undergrads
- 55% Grads

Numerous Formal Rotational Programs to Accelerate the Careers of New Grads

- **Career Discovery Program**: Inspire innovation and enhance career growth through diverse functional experiences while building an early career talent pipeline, with a focus on considering diverse candidates.

- **Puerto Rico Rotation Program**: Attracting the best talent via AML internships and co-ops to build “best place for talent” at Puerto Rico site.

- **Rhode Island Rotational Leadership Development Program**: A rotation program for new college graduates with high potential to develop the seed for a stronger pipeline of future leaders.

- **Data Excellence Development Program**: Attract top university talent to bring cutting-edge data science skills to Amgen, and to build a cohort of future leaders who have DS expertise.

- **MIT Leaders for Global Operations**: Accelerated development program through MIT partnership with an emphasis in leadership/management roles.

- **Future Operations Leaders Program**: A network-wide rotation program for existing top talent early in career (L5-L6) to develop the breadth needed for future leadership roles.

- **Finance & Strategy Leadership Development Council**: Enables staff to gain generalist and specialist experiences while taking on challenging roles with high performance standards.

- **Commercial Leadership Program**: Recruit, retain, and develop top MBA talent with leadership capabilities and aspirations to support the commercial talent pipeline.

- **Human Resources Development Program**: Provide early in career talent with a breadth of targeted experiential opportunities to accelerate growth and development, building critical future capabilities for next generation of leaders.
WE REWARD OUR STAFF FOR REWARDING WORK

- Securing long-term financial, physical and overall well-being
  - We do so through award-winning retirement plans, combined compensation, and robust and inclusive benefits including incentives for healthy living and paid time-off for volunteering.
- Fostering and enabling growth, both personally and professionally
  - We provide state-of-the-art technology and modern working environments that foster innovation and collaboration with a focus on quick decision-making.
  - Staff have fulfilling careers through challenging assignments, active career development and coaching, and individual rewards.
  - We foster a culture of inclusion and value diversity; our ERGs are partners in strengthening our culture and business impact.
WE PROVIDE MEANINGFUL DEVELOPMENT OPPORTUNITIES

We believe that meaningful learning and development drives Amgen’s excellence at every level across all functions, regions, and business units to prepare for current and future needs.

**LEADING YOURSELF**
Develop personal effectiveness

- Technical Training
  - Role and function specific
  - GCO, R&D, OPS

- Career Skills Training
  - Optional for All Staff, CDP driven

**LEADING OTHERS**
Develop and engage teams

- Leadership Skills Training
  - Optional & driven by career development plan

- New Manager Training
  - Required for People Leaders with 1 direct report*

**LEADING THE BUSINESS**
Develop high performing cultures

- Executive Development, Coaching and Mentoring

- Targeted Executive Programs
  - By nomination

24/7 Self-Study, Online, Bite-Sized Learning Resources
CONCLUSION AND RECOMMENDATIONS

• We all must play a role in building skills for the future workforce and STEM is a critical component
  – Funding is needed to grow the pool and promote STEM Education: 80% of US high school students either lack interest or proficiency in STEM subjects, and the number of students pursuing STEM is growing at less than 1% annually

• How can Congress help create the next generation workforce?
  – Continue to support STEM education to build the pipeline of future scientists
  – Invest in basic research at NIH & Universities to expand our understanding of science
  – Protect strong patents and intellectual property to maintain the strong biotech ecosystem here in the U.S.
Maxim’s Nationwide Workforce

23,000 Non-clinical

- Recruiting, training, and managing the full spectrum of caregivers
- Caring for some of the most complex and medically fragile patients
- Over one million flu shots provided annually
- Over 600k health screenings annually
- Operates 24/7 clinics that manage over 120k patient encounters annually
- Helped a hospital system reduce readmissions by over 65% for high risk patients

65,000 Caregivers Nationwide
Changing the Member Experience Together

**Meet Judy**
- Age 72
- Recently discharged from the hospital

**How the system sees Judy**
- A diabetic who was just discharged from the hospital following her 3rd stroke

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**Meet Nancy**
- Part of a Community Health Worker team
- Works under the supervision of a Registered Nurse

**How Nancy sees Judy**
- Living in a difficult neighborhood
- Lacks transportation
- Husband suffering from prostate cancer
- Is forgoing her own insulin in order to fund her husband’s radiation treatment
- Does not have a glucometer

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**How can Technology Help Judy?**
- Helps find Judy before she ends up back in the hospital via claims, Rx, demographic and chart data
- Helps prioritize Nancy’s work to focus in on services most likely to drive positive outcomes
- Helps Judy and Nancy understand all the benefits and social services available to support Judy and her husband living at home

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**What does Nancy do for Judy?**
- Helps Judy navigate her benefit and other services to better understand Rx coverage, Supplemental Benefit options and 3rd party programs
- Arranges a transportation service to help Judy to the pharmacy and grocery store
- Takes Judy to the grocery store to help her learn how to choose healthier options for her and her husband
- Helps Judy obtain a glucometer and makes sure she knows how and when to use it
- Educates Judy around both her and her husband’s conditions
Avoidable utilization is not always the problem

For complex patients, utilization may actually be a symptom of underlying socioeconomic and behavioral challenges.
Community-Based Care Management

**Value**
- # avoided ER visits
- # avoided hospitalizations
- More accurate RAF scores
- Improved HEDIS & Stars
- Program priced on PMPM model with quality incentives

**Identifying**
- Data
- Diversion Program
- Encounter
- Post Acute Care Program
- Safety Net

**Engagement**
- Referral
- Referral
- Referral

**Program Education**
- Identification
- Engagement
- Program Enrollment

**In-Home Assessment & Care Plan**
- PCP, Clinic
- Referral
- Referral

**Ongoing CHW Engagement**
- # avoided re-hospitalizations
- Program priced on PMPM model with quality incentives

**New Community Health Workers Can Help**
- Identify and apply for qualifying health benefits
- Build trust
- Assist patients in healthy lifestyle changes
- Address culturally-appropriate health education and warning signs
- Facilitate care management with providers
- Maintain primary care provider relationship
- Test with ongoing medical supplies
- Offer psychosocial support
- Meet patient with community resources to remove barriers
- Provide transportation to appointments and pharmacy

**Program Elements**
- Social Determinants
- Medical Comorbidities
- Poor Functional Status
- Psychological Factors
- Economic Indicators

**Program Components**
- Safety Net
- Diversion Program
- Encounter
- Post Acute Care Program

**Maxim Healthcare Services**
**Two Year Case Study**

1,475 Patients

Average per patient program cost: $550 x 1475 = $811,250

Potentially avoided readmission: 221 x $14,000 = $3M

ROI = 3.8 to 1
# Program Effect on Inpatient Spending

*Average per patient inpatient charges*

<table>
<thead>
<tr>
<th></th>
<th>30 days pre</th>
<th>30 days post</th>
<th>% variance</th>
<th>90 days pre</th>
<th>90 days post</th>
<th>% variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Participants</strong></td>
<td>$20,607</td>
<td>$13,401</td>
<td>-35%</td>
<td>$25,596</td>
<td>$23,308</td>
<td>-9%</td>
</tr>
<tr>
<td><strong>Non-program Participants</strong></td>
<td>$20,497</td>
<td>$19,618</td>
<td>-4%</td>
<td>$25,700</td>
<td>$28,776</td>
<td>+12%</td>
</tr>
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</table>
What does a Maxim CHW do...

Engage patients as connectors for groups that have traditionally lacked access to adequate healthcare

Provide support with scheduling appointments, educating patients on disease-specific protocols and care management

Connect patients with primary care physicians and community resources such as housing, meal preparation, transportation, or substance abuse treatment

Serve as trained members of the community in which they live and serve

Convey health messages, promote healthy behaviors, and increase the general health of the community

Create a sense of familiarity, trust, and comfort with patients

Resolve potential racial or ethnic barriers to care

Help their patients is a way that is consistent with the patients’ values and needs

Support the emotional needs of the patient

The roles and functions of CHWs vary based on location and setting
The Hidden Challenge of CHW Management
Who is a Maxim CHW...

Background:
• We look for CHWs with a bachelors or associates degree in psychology, health education, public or community health, or are experienced as a Certified CHW, or in social work, nursing (LPN, CNA), or behavioral health counseling.
• Recruited from the communities they serve (geographic, ethnic, occupational or disease specific)

Training:
• ~80 Hour Training and Mentorship program
  • Maxim specific compliance
  • Introduction and history of the CHW role
  • Overview of the CHW Profession
  • CHW roles and competencies
  • CHW ethics
  • Overview of Medical, Mental Health, Functional and Social Conditions
  • Motivational Interviewing
  • Documentation
  • Field-based practicum and mentorship

CHW training can be tailored to the specific needs of the customer
CHW Training Targets a Wide Range of Goals and Conditions...
“In May, about 10% of St Joseph’s high-risk patients were readmitted within 30 days, compared with 25% when the hospital launched the program in February 2015 in partnership with medical staffing company Maxim Healthcare.”

“It was Maxim that approached St. Joseph, (Dr. Gail) Cunningham said, to explore the idea of examining nonmedical factors that contribute to readmissions and using community health workers to reduce unnecessary returns.” (10/22/16)

“Maxim and UMSJMC have data through May 2016. In that period, the program involved about 1,800 patients overall. It has driven the readmission rate down for this patient group by more than 60%.” (10/4/16)

“Readmissions aren’t the problem – they are a symptom. The real problem occurs when patients with complex medical issues and unmanaged psychological or social challenges don’t receive the support they need to maintain their health.”

— Mohan Suntha, MD, MBA, president and CEO of the University of Maryland Medical Center.

“This partnership has allowed us to step beyond the role hospitals have traditionally played in a patient’s recovery to create a measurable positive impact on the health of the population we serve.”

— Dr. Thomas B. Smyth, president and CEO of UMSJMC
HEALTHCARE LEADERSHIP COUNCIL
STATE OF THE HEALTHCARE WORKFORCE

PERSPECTIVES FROM
CITY OF HOPE

Harlan Levine, MD
President, Strategy & Business Ventures

October 26, 2018
Who is City of Hope?

CITY OF HOPE
NCI-designated Comprehensive Cancer Center

We are at the center of eliminating cancer and diabetes. Through integrated networks of scientific innovation and deeply personalized care we bring tomorrow’s discoveries to the people who need them today.

EVERYTHING STARTS WITH OUR PATIENTS

We treat nearly 70,000 patients annually

>14,000 bone marrow transplants to date

>1,580,000 square feet Clinical & Research Facilities

>10,000 Robotic Surgeries

>6,000 Research Investigators

≈600 Scientific Publications in 2016

>500 Active Research Trials

≈600 Research Budget

>6,000 Cancer Network Locations

>30 Potential Therapies in Pipeline

>30,000 Active Research Trials

>6,000 Cancer Network Locations

>90,000 Medical Faculty & Employees

>10,000 Philanthropic Donors Annually

>10,000 Philanthropic Donors Annually

$90M Research Grants

$400M Research Budget

$400M Research Budget

>6,000 Clinical research patients

>6,000 Clinical research patients

>6,000 Philanthropic Donors Annually

>6,000 Philanthropic Donors Annually

>10,000 Philanthropic Donors Annually

$400M Research Budget

$400M Research Budget

Excellence in Compassionate Patient-Centric Care

State-of-the-Art Personalized Value-Based Medicine

Redefining Innovation and Cancer Care

Heightened Leadership in Heme-malignancy & Stem Cell Transplant

Trailblazers in Cancer and Diabetes Innovations & Potential Cures

Bone marrow transplants to date
Oncology Presents Specific Challenges to Employers

The Cancer Problem

- New diagnoses will increase from 1.6M to 2.3M by 2030
- Diagnosis and treatment is complex and expensive
- Gap between best-in-class care and standard widens every day

Employer Challenge

- Impacts small percentage of workforce but accounts for large percentage of healthcare spend
- Innovative treatments are driving cost of care
- Workforce productivity is impacted by all affected with cancer (patient, family, colleague)

Sources:
1 Center for Health Policy and Outcomes at Memorial Sloan Kettering Cancer Center
What’s Behind The Revolution in Employer Health?

- Affordability
- Patient Experience
- Quality of Care

Health Plans Are Frequently Focused Primarily on Unit Cost
Cancer is different just like people are different

As the gap between optimal care and average care widens, employers are seeking trusted partners and innovative solutions to re-invent oncology benefits and care for their employees.
Reimagining the Health Plan Process

Utilization management from limiting care to optimal care

Network management from lowest cost to the optimal expertise

Cost management from lowest unit price to optimal outcome
How City of Hope is Making This a Reality

Expert Oncology Services:

• Oncology Nurse Line
• Longitudinal Second Opinions
• Accountable Precision Oncology™
When It Comes To Cancer, It’s All About the Patient

What Do Patients Really Want?

- The right diagnosis early
- An innovative and expert cancer team who knows me as a patient but also as a mom, dad, employee, or soccer coach
- A comprehensive care plan that understands my medical needs but also my social, emotional and even financial needs

A Reinvention (or Reengineering) of Oncology Support Programs Must Start With The Patient at the Center
Key Asks For Legislative Staff

• We ask for the opportunity to work with HHS/CMS to create innovative models of sustainable reimbursement and service models for the care of patients with complex and high-risk cancers

• We would like to work with legislative staff to ensure incentives are properly aligned to consider not only cost but also quality from expert care
Open Discussion / Q&A

Ask us anything.

We’re here to work with you to find the right solution for the patients who need us to get this right.