Opportunities in the Health Care Practice at Analysis Group

Johns Hopkins Blomberg School of Public Health

October 3, 2016
You Will Learn Today:

• **Who** the Analysis Group is
• **What** our Health Care Practice does
• **How** you would contribute
• **How** to apply
Introducing Analysis Group

• One of the largest privately held economic consulting firms in North America
• We serve major law firms, Fortune 100 firms & government agencies
• Our team includes over 600 professionals, many with graduate degrees in economics, finance, accounting, management or law
• Launched in 1981 in Boston; 11 offices today in the U.S., Canada, and China
• Highly ranked employer
  – Vault: One of the top U.S. consulting firms for last several years
  – Boston Globe: Appearances on “Top Places to Work” survey (large company category) the last 7 years
  – Glassdoor: Best place to work in 2015
We apply economic theory & methods to analyze real-world business questions

- **Analyze** economic, financial, and accounting data
- **Assess** market structure, conduct, and performance
- **Calculate values** of securities and business entities
- **Develop** cost studies, calculate lost profits, and assess damages in litigation matters
- **Model** alternative financial outcomes under various macro and micro conditions
- **Contribute** expertise to reports and testimony in litigation and merger matters
- **Recommend** strategic course of action based on empirical analysis
- **Apply** analytical expertise to health economics and outcomes research
We work across industries, and put deep focus in several areas

- Valuation
- Antitrust
- Energy & Environment
- Commercial Litigation & Damages
- Financial Institutions & Securities
- Intellectual Property
- Strategy
- Health Economics & Outcomes Research
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Our Health Care practice includes expertise across several disciplines

- Health economics
- Market access and reimbursement
- Biostatistics & statistics
- Epidemiology
- Psychometrics
- Medicine & pharmacy
- Health policy
Our team leads the industry in linking evidence to clinical practice

**Analytic expertise**
- Health economics & outcomes research
- Drug safety & epidemiology
- Health care related litigation
- Market access and commercial strategy
- Public policy

**Research**
- Publish in top academic and clinical journals
- Present at conferences

**Collaboration**
Network of scholars and researchers from leading universities and medical institutions
1. **Understand** evidence requirements to develop commercial strategy and identify and support strong value propositions

2. **Identify** valuable study questions, **design** and **implement** data-intensive analyses, and **disseminate** findings

3. **Draw on** expertise in health economics, biostatistics, econometrics, statistics, epidemiology, medicine, and business strategy – and our relationships with leading academics

4. **Develop** innovative approaches to assess efficacy, safety, and costs of therapies used to combat a range of diseases
Collaboration with 100+ world-class opinion leaders increases impact

Select collaborators

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Lee-Jen Wei, Ph.D.</td>
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<td>Peking University School of Management</td>
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<tr>
<td>Robert P. Navarro, Pharm.D.</td>
<td>Co-founder of AMCP</td>
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We have supported product launches around the world

Product launch expertise

- Support global health economics and outcomes (HEOR) teams
- Provide local stakeholders with evidence based on market-specific data and economic models
We contribute evidence throughout the product life cycle

**Discovery & development**
- Conduct early stage modeling and gap analysis
- Help refocus later phase trials via personalized medicine
- Identify, design, and validate appropriate patient-related outcome instrument

**Patent expiration & late life cycle**
- Identify high-value subpopulations
- Defend against new entrants
- Defend against generic/biosimilar entry
- Analyze treatment pattern and adherence
- Support market expansion

**Product approval & launch**
- Increase awareness of diseases and unmet needs
- Submit health technology assessment/reimbursement: CEA, BIA, Dossier
- Demonstrate product value relative to conventional therapy

**Post-launch optimization**
- Identify high-value subpopulations
- Defend against new entrants
- Defend against generic/biosimilar entry
- Analyze treatment pattern and adherence
- Support market expansion
Some recent high-profile cases

**The New York Times**
Drug deal ties prices to how well patients do

**THE WALL STREET JOURNAL.**
GlaxoSmithKline’s Votrient approved by UK health cost regulator

**FDA U.S. Food and Drug Administration**
Antidepressant Use in Children, Adolescents, and Adults

**NHS National Institute for Health and Clinical Excellence**
Adalimumab for the Treatment of Psoriasis

- **Votrient** (renal carcinoma) cost effectiveness proof
- **Actonel** (osteoporosis) reimbursement for payers
- **Humira** (arthritis) health economic submission packages for payers
- **Celexa** (antidepressant) extra safety labeling opposition
A case example from my AG experience...
Communicating the value of a new product to payers is often critical for market access. Analysis Group frequently works with clients to assess the information needs of key stakeholders and then to organize, integrate and clearly communicate the clinical, humanistic, and economic evidence supporting market access decisions in the context of formulary reviews and health technology assessment.

**Global Value Dossiers**
- Support reimbursement submissions and health technology assessments across the world

**AMCP Dossiers**
- Formulary submissions to U.S. health plans

**Dossiers and Evidence Packages for Diagnostics**
- Dossiers for the assessment of novel diagnostics supporting MolDx requirements

**Evidence Packages for Hospital-based Products**
- Dossiers targeting hospital decision makers and other relevant stakeholders

**Communication Tools for Field-based Teams**
- Tools for account managers and medical science liaisons
Early-Stage Forecasting Model
Valuation of a Novel Drug for Ophthalmology and Oncology

Sales ($B)

- **Base Case**
  - Sales peak at $1.60B in 2025
  - Present Value\(^1\), $3.1B

- **High Case**
  - Sales peak at $3.24B in 2028
  - Present Value\(^1\), $4.9B

[1] Present value is calculated as the sum of discounted revenues from 2015 – 2034 using a 15% discount rate. Does not include risk of technical failure.
Early-Stage Forecasting Model
Exploring Drivers of Valuation Through Sensitivity Analysis

Drivers

- Market Size
- Likelihood of Reimbursement
- Patient Share
- Price
- Duration of Therapy

Baseline Peak Sales ($B)

Therapeutic Area 1

-10% Benchmark: -$3,000
+10% Benchmark: $3,000
50% US EU Cash
Physician -10% +10%

Therapeutic Area 2

-1 year +1 year

1.3

0.5
More examples of AG case work...
This model played a critical role in yielding a favorable decision for a new indication from NICE, and was adapted to support approval in 15 other countries.
AG compared survival outcomes in metastatic renal cell carcinoma (mRCC) patients taking different therapies using online chart data.

**Online Chart Review**

**Survival in Oncology**

Geographically diverse sample of oncologists

Oncologists who had treated patients with mRCC

Random selection of 5 eligible patient charts

Physicians enter chart data online

Final Sample

- 233 charts for patients on Drug A
- 178 charts for patients on Drug B

- **Overall survival, %**

- **Days from initiation of second targeted therapy**

- **P = 0.0007**

Drug A

Drug B
Temporal adherence clusters improved the prediction of future risk

Adjusting for temporal adherence patterns reveals associations between increased MPR and reduced risk and resource use that were not otherwise apparent.
In spite of evidence that the CFF treatment guidelines improve health outcomes and lung function, use of the recommended medications is variable.

Clinical Predictive Modeling
Cystic Fibrosis Foundation Patient Registry

Daily medication burden in CF

Research application: web-based risk calculator
Personalized Medicine
Interactive, Patient-Specific Outcome Calculator

Interactive tool allows for patient-specific, personalized decision-making
The personalized medicine approach identifies the efficiency frontier – the largest market size at any level of efficacy – and can identify treatments that work best for specific patients.
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Analysts & Associates are critical to all types of healthcare projects

- Evidence dossiers
- Comparative effectiveness studies
- Evidence Development Strategy
- Forecasting and Valuation
- Treatment pattern evaluations
- Budget impact and risk/benefit analyses
Our dynamic culture and supportive environment foster your success

Experience
Work across many disciplines

Exposure
Learn about different industries and areas of expertise

Challenge
Collaborate with highly motivated and skilled colleagues

Access
Interact closely with firm leaders, academic affiliates and clients

Growth
Develop your career through flexible case assignments and strong mentoring across all levels
Who makes a good Health Care Analyst candidate?

IDEAL ANALYST:

✓ **Degree** – master’s or bachelor’s – in public health, economics, business, biostatistics, health policy or a related field

✓ **Interest** in applying a mix of qualitative and quantitative research methods to real-world business problems in the life sciences industry

✓ **Excellent** organizational & communication skills

✓ **Detail and accuracy** focus

✓ **Intellectual** curiosity and desire for ongoing learning

✓ **Confidence** interacting with clients and academics

✓ **Flexibility** to work independently and with a team
Who makes a good Health Care Associate candidate?

**IDEAL ASSOCIATE:**

- **Advanced degree** – PhD in health care-related field, e.g., health economics, biostatistics, epidemiology, psychometrics, or public health
- **Track record** of applying qualitative and quantitative methods to real-world problems
- **Experience** in the health care industry or health care research, including familiarity with biomedical literature
- **Excellent** organizational & communication skills
- **Confidence** interacting with clients and academics
- **Flexibility** to work independently and with a team
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The application process starts online

- Full-time Health Care Analyst and Associate positions are posted on our website: [www.analysisgroup.com/careers](http://www.analysisgroup.com/careers)
- The deadline to apply is **Sunday, October 16th**
- Select appropriate position and submit materials through the website:
  - Resume
  - Unofficial transcript(s)
  - Cover letter indicating geographic preference(s)
What will we want to learn at an interview?

YOUR INTERVIEW:

• Your academic experience and career goals
• Industry experience or specialized expertise
• Data-driven papers or projects you’ve worked on

• Analytical and technical skills; conceptual abilities
• Communication skills and teamwork experiences
• Displays of leadership
• Interest in economic consulting
“Once you experience Analysis Group, you will want to work here for the rest of your career. There is no higher praise than that for a workplace.”

Learn more at: www.analysiscroup.com